

**MAYBANK PLANNED
DEVELOPMENT - TRAFFIC IMPACT
ANALYSIS**

Charleston, South Carolina



Prepared for:
Core Property Capital

Prepared by:
Stantec Consulting Services Inc.

June 2016

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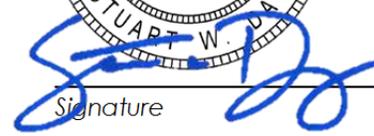


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Executive Summary

A traffic impact analysis was conducted for the Maybank Planned Development in accordance with City of Charleston and SCDOT guidelines. The proposed Maybank Planned Development is located on the south side of SC 700/Maybank Highway between Fleming Road and Wappoo Creek Drive in the City of Charleston, South Carolina and is proposed to consist of 278 apartments and 7,500 square feet of retail.

Access to the development will be provided through one existing full access driveway along SC 700/Maybank Highway and one existing full access driveway along Fleming Road. These driveways will be shared with the adjacent development, The Standard.

The results of the signalized intersection analyses indicate that the study intersections (see page 1 for study intersections) currently operate and are expected to continue to operate at an acceptable LOS with consideration of the Maybank Planned Development, with one exception. The SC 700/Maybank Highway/Country Club Drive & SC 171/Folly Road intersection currently experiences LOS E conditions during the PM peak hour and is anticipated to experience LOS F conditions in the future, with or without the project. Project traffic is projected to be 1.8% of the total intersection traffic for the 2019 Build conditions. Due to the fact that the intersection is projected to operate at undesirable conditions and the minimal impact of the project traffic, no improvements are recommended at this time.

The results of the unsignalized intersection analyses show the SC 700/Maybank Highway approaches to the intersections with Fleming Road and the Project Driveway currently experience free-flow LOS A conditions and are expected to continue to experience free-flow LOS A conditions with the development of the project site. The northbound approach of the SC 700/Maybank Highway & Fleming Road intersection currently experiences LOS E conditions during the AM peak hour and is anticipated to experience LOS F conditions in the future with or without consideration of the Maybank Planned Development. The northbound approach of the SC 700/Maybank Highway & Project Driveway intersection is projected to experience undesirable delay in the future with the development of the project site. Future signalization of the SC 700/Maybank Highway & Fleming Road intersection would mitigate the undesirable condition at both intersections. Therefore, it is recommended that a signal warrant analysis be performed to determine if signal warrants would be met at the intersection of SC 700/Maybank Highway & Fleming Road upon completion of the Maybank Planned Development and The Standard.

Based on the *Highway Design Manual* considerations for the project driveways, exclusive ingress turn lanes along Fleming Road at the project driveway are not recommended at this time. The existing right-turn lane along SC 700/Maybank Highway will serve the eastbound right-turn movement at the project driveway and the existing two-way left-turn lane along SC 700/Maybank Highway will serve the westbound left-turn movement at the project driveway.

1.0 Introduction

The purpose of this report is to document a traffic impact analysis for the Maybank Planned Development in accordance with City of Charleston and SCDOT guidelines. This report summarizes the procedures and findings of the traffic impact analysis.

1.1 PROJECT BACKGROUND

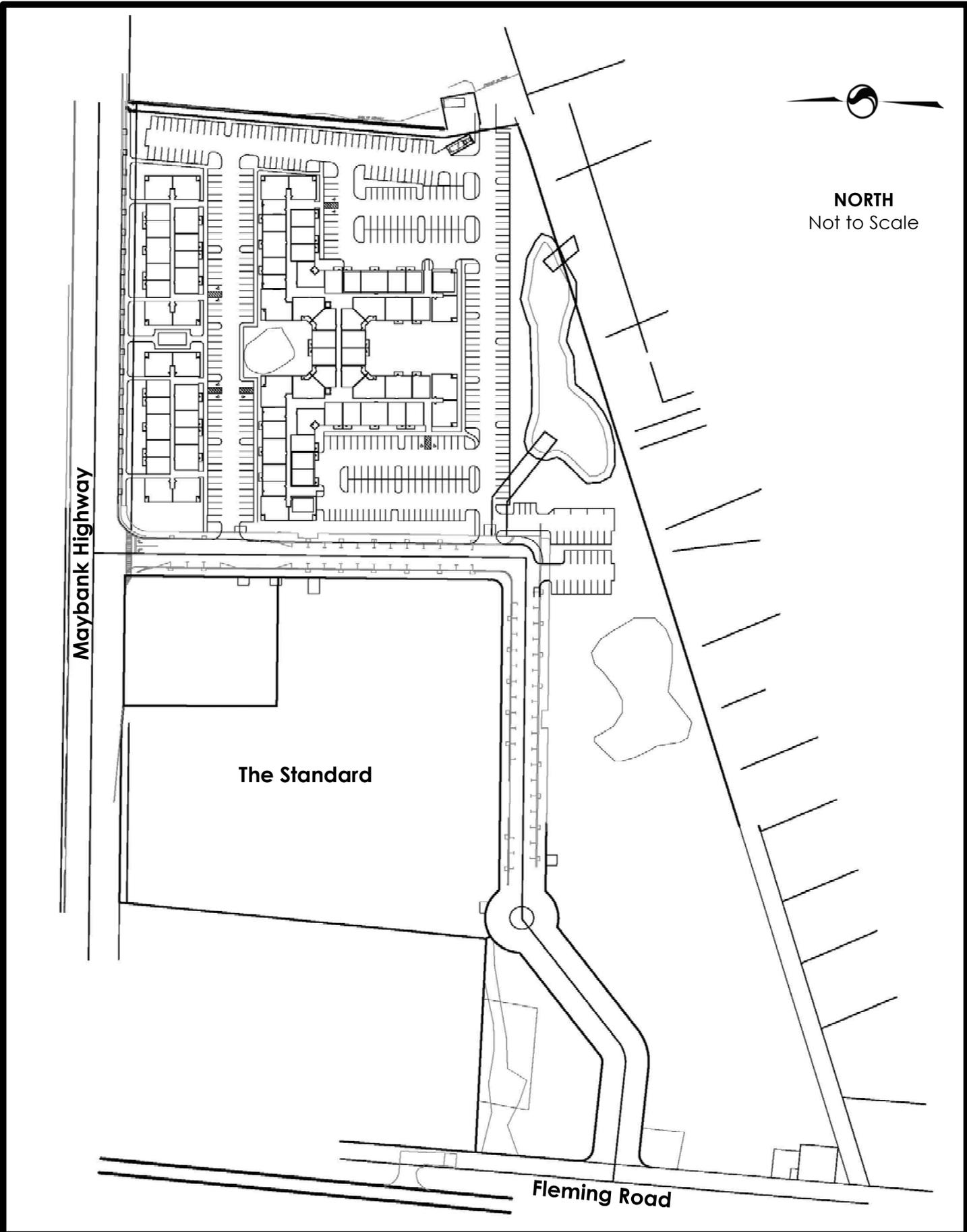
The proposed Maybank Planned Development is located on the south side of SC 700/Maybank Highway between Fleming Road and Wappoo Creek Drive in the City of Charleston, South Carolina and is proposed to consist of 278 apartments and 7,500 square feet of retail. Access to the development will be provided through one existing full access driveway along SC 700/Maybank Highway and one existing full access driveway along Fleming Road. These driveways will be shared with the adjacent development, The Standard.

The traffic impact analysis considers the weekday AM peak hour (between 7:00 AM and 9:00 AM) and the weekday PM peak hour (between 4:00 PM and 6:00 PM) as the study time frames. Based upon discussions with city staff, the extent of the existing roadway network to be studied consists of the five (5) intersections of:

- 1) SC 700/Maybank Highway & Fleming Road;
- 2) SC 700/Maybank Highway & Wappoo Creek Drive;
- 3) SC 700/Maybank Highway & Old Folly Road;
- 4) SC 700/Maybank Highway/Country Club Drive & SC 171/Folly Road; and
- 5) Old Folly Road & SC 171/Folly Road.

The buildout date for the proposed development is anticipated to be 2019; therefore, future-year 2019 conditions were analyzed as the Build scenario. Exhibit 1.1 illustrates the location of the project site, including the adjacent public roadway network, and Exhibit 1.2 illustrates a site plan of the proposed development.





NORTH
Not to Scale

Maybank Highway

The Standard

Fleming Road

1.2 EXISTING ROADWAY CONDITIONS

SC 700/Maybank Highway is a five-lane arterial, with a two-way left-turn lane, which primarily serves residential and commercial land uses. The posted speed limit is 40 mph and the 2015 AADT was 23,800 vpd. Based upon existing turning movement counts, the percentage of heavy vehicles along SC 700/Maybank Highway is 1%.

Fleming Road is a two-lane local road that primarily serves residential land uses. The posted speed limit is 35 mph and the 2015 AADT was 2,300 vpd.

Old Folly Road is a two-lane arterial, with turn lanes at the intersections with SC 700/Maybank Highway and SC 171/Folly Road, which serves commercial land uses. Based upon existing turning movement counts, the percentage of heavy vehicles along Old Folly Road is 1%.

SC 171/Folly Road is a five-lane arterial, with a two-way left-turn lane and turn lanes at the study intersections, which primarily serves commercial land uses. The posted speed limit is 40 mph and the 2015 AADT was 29,800 vpd. Based upon existing turning movement counts, the percentage of heavy vehicles along SC 171/Folly Road is less than 1%.

2.0 Driveway Spacing Review

Access to the development will be provided through one existing full access driveway along SC 700/Maybank Highway and one existing full access driveway along Fleming Road. These driveways will be shared with the adjacent development, The Standard.

Due to the fact that the project will access existing driveways, no additional improvements are recommended at this time.

3.0 Project Traffic

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the Maybank Planned Development. These trips were distributed and assigned throughout the study roadway network.

3.1 PROPOSED LAND USES

The Maybank Planned Development consists of 278 apartments and 7,500 square feet of retail. The project site is currently vacant.

3.2 TRIP GENERATION ESTIMATES

The trip generation potential for the development was estimated using information contained in ITE's *Trip Generation Manual*, 9th Edition (2012) reference. The estimates utilized land use code (LUC) 220 – Apartment and LUC 820 – Shopping Center and were developed for the weekday daily, the weekday AM peak hour of the adjacent street, and the weekday PM peak hour of the adjacent street time periods.

Due to the nature of the development, internal and pass-by capture was also considered in the trip generation estimates. Internal capture considers interaction between multiple uses in a development and was limited to 20%. Pass-by traffic is attracted from the existing traffic volumes on adjacent roadways and reduces the new trip impacts of a retail project site. Internal and pass-by capture traffic was estimated using information contained in ITE's *Trip Generation Handbook*, 3rd Edition (2014) reference.

The trip generation estimates for the development is shown in Table 3.1 and documented in Appendix A.

Table 3.1 – Trip Generation Estimates

Land Use	ITE LUC	Scale	Daily	Weekday AM Peak Hour		Weekday PM Peak Hour	
				Enter	Exit	Enter	Exit
Apartment	220	278 DU	1,808	28	112	111	60
Shopping Center	820	7,500 sf	1,261	20	12	51	55
Gross Trips:			3,069	48	124	162	115
-Internal Capture:			-452	-2	-2	-19	-19
-Pass-by Capture Trips:			-352	-5	-5	-15	-15
New, External Trips:			2,265	41	117	128	81

3.3 MODAL SPLIT

The modal split is the percentage of trips using a particular mode of travel (such as vehicles, bicycles, walking, and telecommuting). With the proximity of the Maybank Planned site to other areas on James Island, there is a great opportunity to provide development within walking and bicycling distance to other

areas on James Island. Based upon the 2014 US Census Bureau data for the City of Charleston, approximately 77% of people drove alone to work, with 23% carpooling, walking, biking, or telecommuting.

Based upon the location of the project, it is expected that residents of the Maybank Planned Development would follow these percentages, reducing vehicle demand by 23%. However, in an effort to provide a conservative analysis, a modal split for carpooling, walking, biking, and telecommuting was not considered in the traffic analysis.

3.4 TRIP DISTRIBUTION & ASSIGNMENT

New external traffic expected to be generated by the Maybank Planned Development was distributed and assigned to the roadway network based upon existing travel patterns in the area. The general distribution of new project trips was assumed to be:

- 25% to/from the west via SC 700/Maybank Highway;
- 50% to/from the north via SC 171/Folly Road; and
- 25% to/from the south via SC 171/Folly Road.

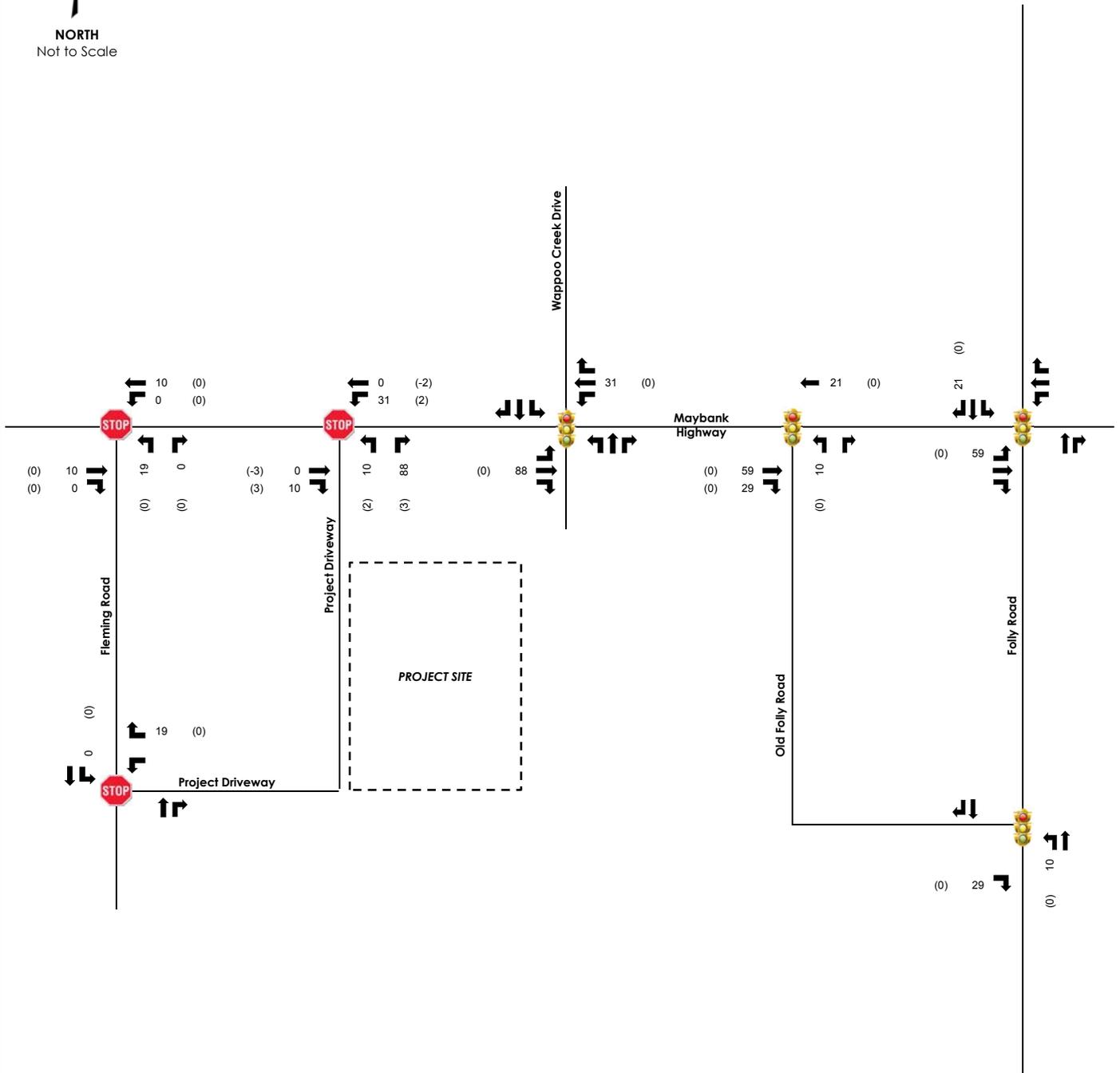
Pass-by traffic expected to be generated by the Maybank Planned Development was distributed and assigned to the roadway network based upon existing travel patterns in the area. The general distribution of pass-by project trips was assumed to be:

- 50% to/from westbound SC 700/Maybank Highway; and
- 50% to/from eastbound SC 700/Maybank Highway.

The assignment of project traffic, in terms of new and pass-by trips, is illustrated in Exhibit 3.1 for the AM peak hour and Exhibit 3.2 for the PM peak hour.



NORTH
Not to Scale

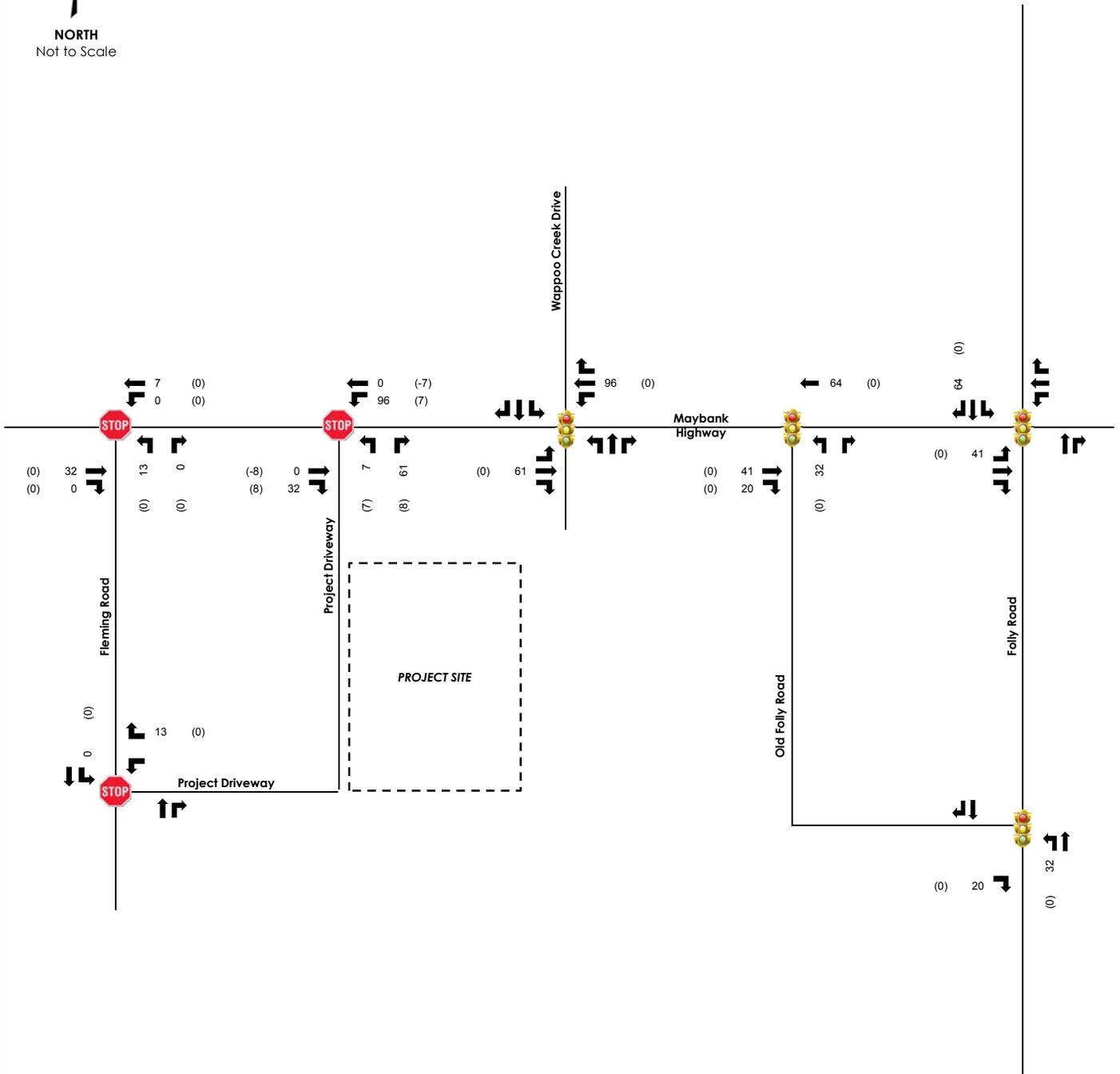


AM PEAK HOUR PROJECT TRAFFIC VOLUMES LEGEND

- 000 - AM Peak External Traffic Volumes
- (000) - SM Peak Pass-by Traffic Volumes



NORTH
Not to Scale



PM PEAK HOUR PROJECT TRAFFIC VOLUMES LEGEND

000 - PM Peak External Traffic Volumes
 (000) - PM Peak Pass-By Traffic Volumes

4.0 Traffic Volume Development

Existing 2015 traffic volumes were collected for use in the analysis and future-year traffic volumes were developed for projected 2016 and 2019 conditions. The future-year traffic volumes consisted of existing traffic volumes adjusted by an annual growth rate, traffic volumes from fully entitled development, and projected traffic volumes of the Maybank Planned Development.

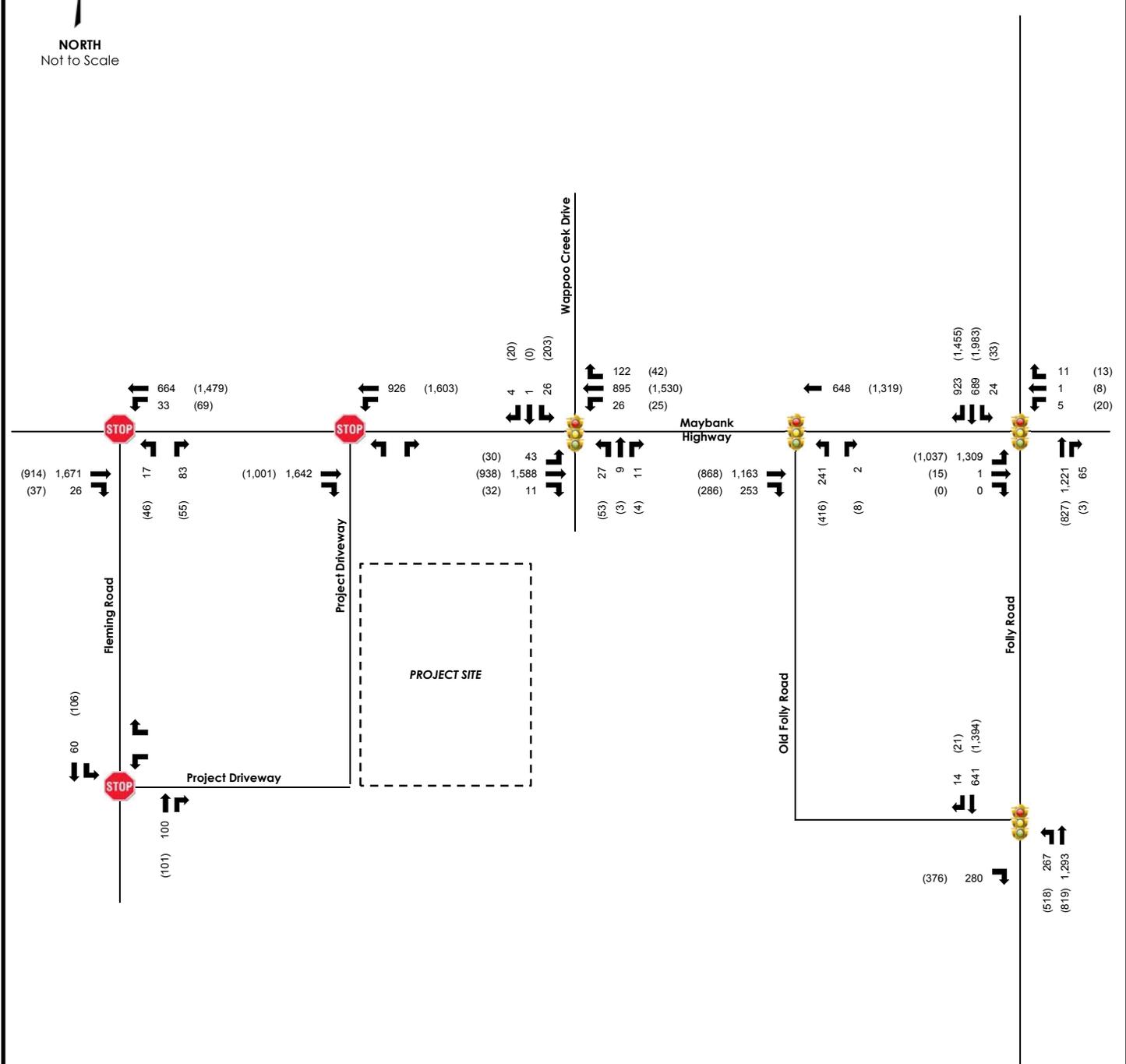
4.1 EXISTING TRAFFIC VOLUMES

Vehicle turning movement counts were conducted during the weekday AM peak period (from 7:00 AM to 9:00 AM) and the weekday PM peak period (from 4:00 PM to 6:00 PM) at the five intersections of: SC 171/Folly Road & SC 700/Maybank Highway and County Club Drive, SC 171/Folly Road & Old Folly Road, SC 700/Maybank Highway & Old Folly Road, and SC 700/Maybank Highway & Wappoo Creek Place for use in the traffic impact analysis.

The raw traffic volume counts are provided in Appendix B and the 2015 existing traffic volumes are illustrated in Exhibit 4.1 and documented in Appendix C.



NORTH
Not to Scale



2015 EXISTING PEAK HOUR TRAFFIC VOLUMES LEGEND

000 - AM Peak Hour Traffic Volumes
 (000) - PM Peak Hour Traffic Volumes

4.2 FUTURE TRAFFIC VOLUME PROJECTIONS

4.2.1 Historical Growth Rates

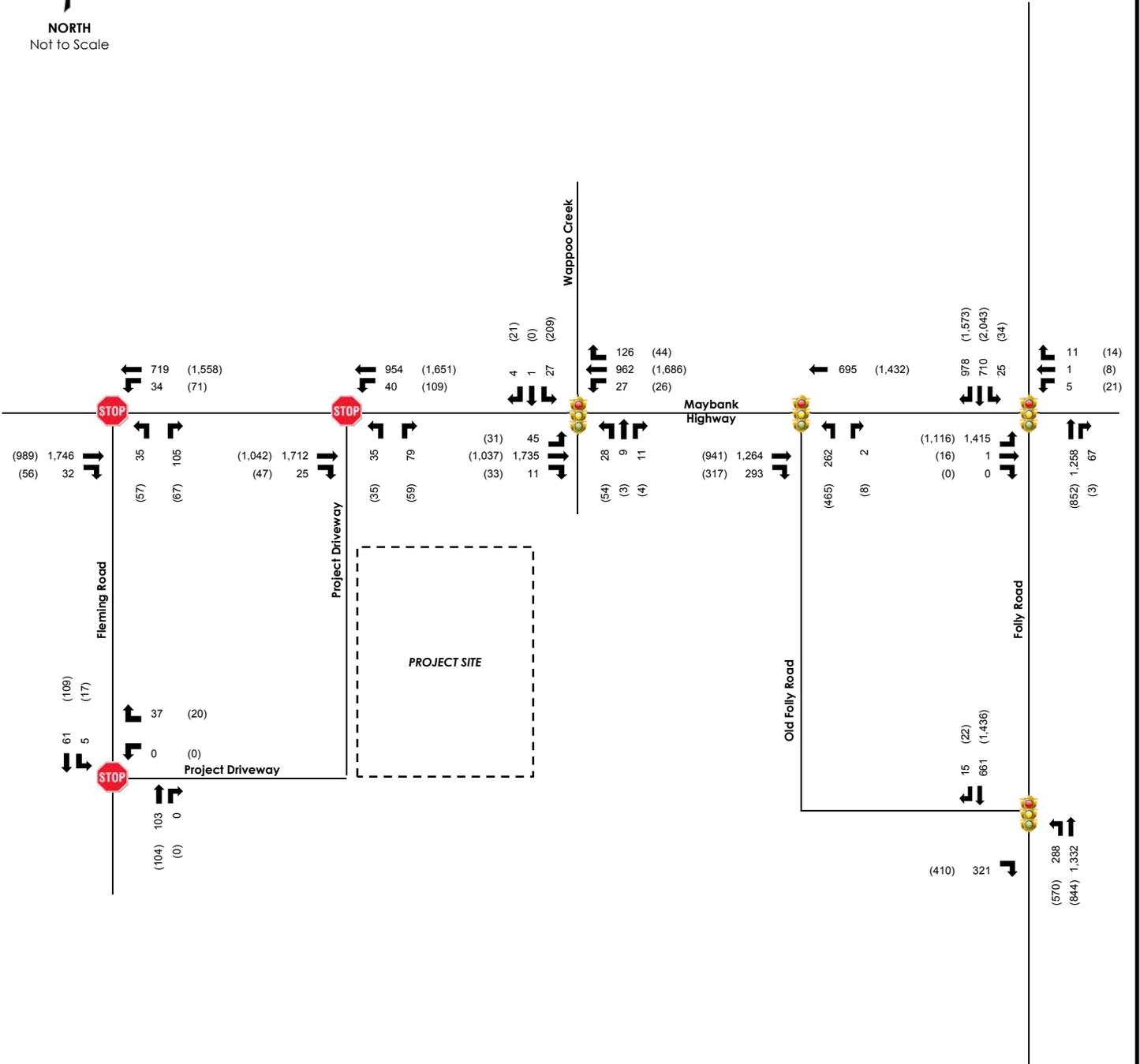
To develop an annual background growth rate for use in the analysis, historical count data along SC 700/Maybank Highway (SCDOT count station #271) and Fleming Road (SCDOT count station #607) was reviewed over the past five years. It was determined that the roadways have collectively experienced annual growth of less than 1.0%. Therefore, a 1.0% annual growth rate was utilized to develop 2016 Existing Conditions, 2019 No Build traffic volumes, which are illustrated in Exhibit 4.2 and documented in Appendix C.

4.2.2 Fully Entitled Development Traffic Volume Projections

In addition to the background growth rates, a fully entitled project is currently underway within the study area and was considered in the analysis. The Standard is located in the southwest quadrant of the SC 700/Maybank Highway & Fleming Road intersection, west of and adjacent to the project site. According to the traffic impact study performed for The Standard, the project is planned to consist of 284 apartment units, 10,000 square-feet of specialty retail space, and a 6,000 square-foot high-turnover sit-down restaurant. The Standard was recently under construction and was completed in late 2015. Since the development of the site is beginning to lease apartments, 100% the trips associated with this development were considered fully entitled for the purposes of this report.

4.2.3 2019 No Build Traffic Volumes

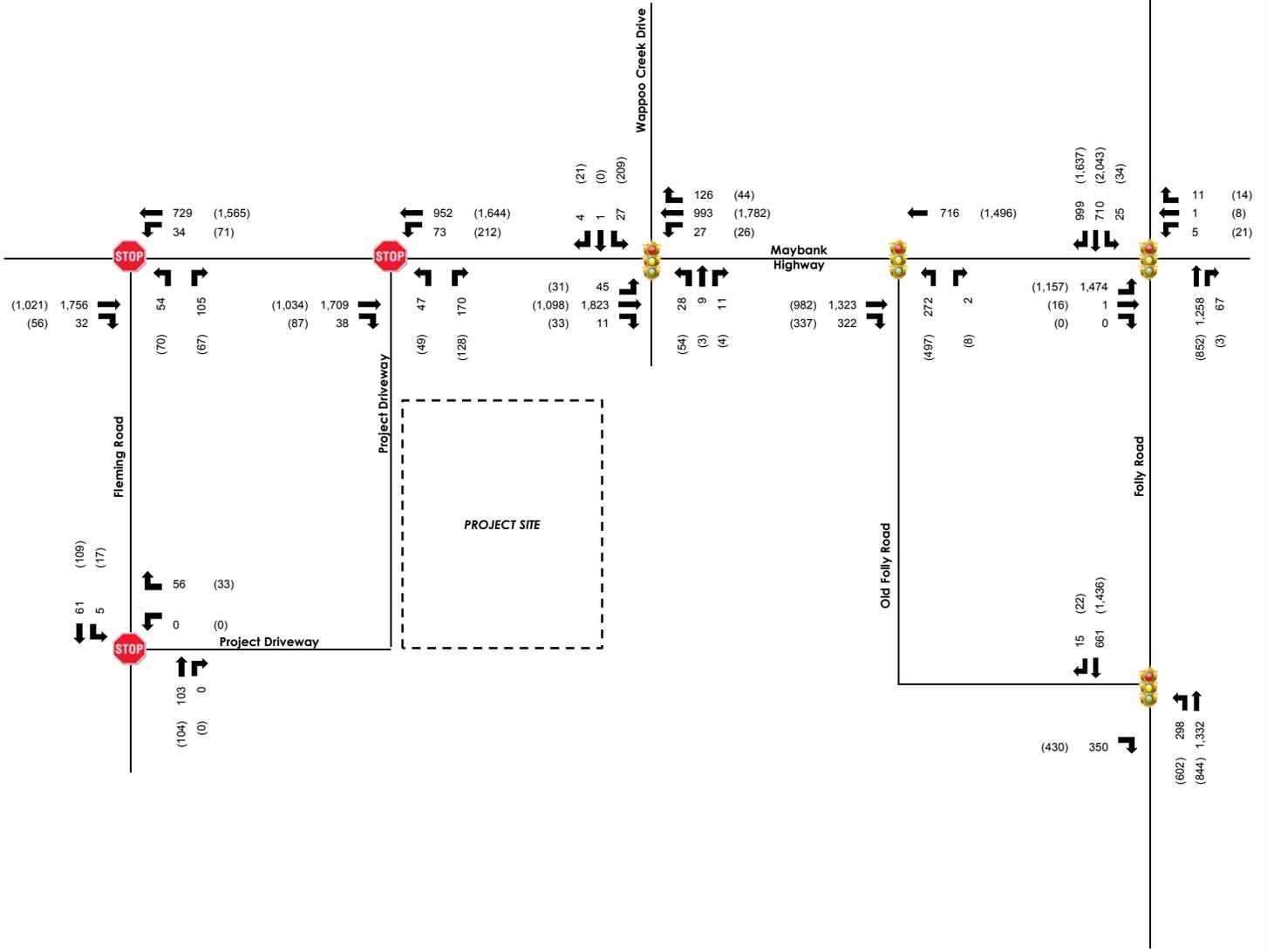
The 2019 No Build traffic volumes, which include consideration of the background growth rates and nearby development traffic volumes, are illustrated in Exhibit 4.2 and documented in Appendix C.



2018 NO BUILD PEAK HOUR TRAFFIC VOLUMES LEGEND
 000 - AM Peak Hour Traffic Volumes
 (000) - PM Peak Hour Traffic Volumes

4.2.4 2019 Build Traffic Volumes

The Maybank Planned Development project traffic volumes were then added to the 2019 No Build traffic volumes to develop 2019 Build traffic volumes, which are illustrated in Exhibit 4.3 and documented in Appendix C.



5.0 Traffic Impact Analysis

Using the existing and projected traffic volumes previously discussed, intersection analyses were conducted for the study and project driveway intersections considering 2016 Existing conditions, 2019 No Build conditions, and 2019 Build conditions. This analysis was conducted using the Transportation Research Board's *Highway Capacity Manual 2010 (HCM 2010)* methodologies of the *Synchro*, Version 9 software for intersection analysis.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, forced-flow (bumper-to-bumper) conditions with high vehicular delays, and are generally considered undesirable. Table 5.1 summarizes the *HCM 2010* control delay thresholds associated with each LOS grade for unsignalized and signalized intersections.

Table 5.1 – HCM 2010 LOS Criteria for Unsignalized & Signalized Intersections

Unsignalized Intersections		Signalized Intersections	
LOS	Control Delay Per Vehicle (seconds)	LOS	Control Delay Per Vehicle (seconds)
A	≤ 10	A	≤ 10
B	> 10 and ≤ 15	B	> 10 and ≤ 20
C	> 15 and ≤ 25	C	> 20 and ≤ 35
D	> 25 and ≤ 35	D	> 35 and ≤ 55
E	> 35 and ≤ 50	E	> 55 and ≤ 80
F	> 50	F	> 80

5.1 INTERSECTION LOS ANALYSIS

As part of the intersection analysis, SCDOT's default *Synchro* parameters were utilized. Existing peak-hour factors (PHF) were utilized in the analysis of existing and future conditions and a minimum PHF of 0.90 and maximum PHF of 0.95 being considered for future-year conditions. Existing heavy vehicle percentages, as previously discussed, were utilized in the analysis, with a minimum percentage of 2% considered. The existing lane geometry was also utilized for the analysis of existing conditions and future-year scenarios.

Using the *Synchro* software, intersection analyses were conducted for 2016 Existing conditions, 2019 No Build conditions, and 2019 Build conditions for the weekday AM peak-hour and the weekday PM peak-hour time periods.

The results of the signalized intersection analyses for existing and future-year conditions for the weekday AM and PM peak-hour time periods are summarized in Table 5.2.

Table 5.2 – Signalized Intersection Analysis Results

Intersection	Intersection Control	LOS/Delay (seconds)					
		2016 Existing Conditions		2019 No Build Conditions		2019 Build Conditions	
		AM	PM	AM	PM	AM	PM
SC 700/Maybank Highway & Wappoo Creek Drive	Signalized	A/6.5	B/12.3	A/6.9	B/15.7	A/7.0	B/15.6
SC 700/Maybank Highway & Old Folly Road	Signalized	A/7.7	A/9.6	A/9.0	B/11.0	B/10.1	B/11.8
SC 700/Maybank Highway/Country Club Drive & SC 171/Folly Road	Signalized	D/42.4	E/67.8	D/52.2	F/93.4	E/56.9	F/101.4
Old Folly Road & SC 171/Folly Road	Signalized	A/2.2	A/9.2	A/2.3	B/14.0	A/2.3	B/15.4

The results of the signalized intersection analyses indicate that the study intersections currently operate and are expected to continue to operate at an acceptable LOS with consideration of the Maybank Planned Development, with one exception.

The SC 700/Maybank Highway/Country Club Drive & SC 171/Folly Road intersection currently experiences LOS E conditions during the PM peak hour and is anticipated to experience LOS F conditions in the future, with or without the Maybank Planned Development. Project traffic is projected to be 1.8% of the total intersection traffic for the 2019 Build conditions. Due to the fact that the intersection is projected to operate at undesirable conditions and the minimal impact of the project traffic, no improvements are recommended at this time.

The results of the unsignalized intersection analyses for existing and future-year conditions for the weekday AM and PM peak-hour time periods are summarized in Table 5.3.

Table 5.3 – Unsignalized Intersection Analysis Results

Intersection	Approach	LOS/Delay (seconds)					
		2016 Peak Conditions		2019 No Build Conditions		2019 Build Conditions	
		AM	PM	AM	PM	AM	PM
SC 700/Maybank Highway & Fleming Road	EB	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0
	WB	A/0.9	A/0.5	A/0.9	A/0.5	A/0.9	A/0.5
	NB	E/44.6	D/31.0	F/118.6	E/44.2	F/216.5	F/60.7
Fleming Road & Project Driveway	WB	-	-	A/9.0	A/8.9	A/9.1	A/9.0
	NB	-	-	A/0.0	A/0.0	A/0.0	A/0.0
	SB	-	-	A/0.6	A/1.0	A/0.6	A/1.0
SC 700/Maybank Highway & Project Driveway	EB	-	-	A/0.0	A/0.0	A/0.0	A/0.0
	WB	-	-	A/0.8	A/0.8	A/1.5	A/1.9
	NB	-	-	E/44.9	D/28.6	F/67.4	E/48.0

The results of the unsignalized intersection analyses for the SC 700/Maybank Highway & Fleming Road intersection indicate that the SC 700/Maybank Highway approaches to the intersection currently experience free-flow LOS A conditions and are expected to continue to experience free-flow LOS A conditions with the development of the project site. The northbound approach of the SC 700/Maybank Highway & Fleming Road intersection currently experiences LOS E conditions during the AM peak hour and is anticipated to experience LOS F conditions in the future, with or without consideration of the Maybank Planned Development. Future signalization of the SC 700/Maybank Highway & Fleming Road intersection would mitigate the undesirable conditions. Therefore, it is recommended that a signal warrant analysis be performed to determine if signal warrants would be met at the intersection of SC 700/Maybank Highway & Fleming Road upon completion of the project.

At the SC 700/Maybank Highway & Project Driveway intersection, the SC 700/Maybank Highway approaches to the intersection currently experience free-flow LOS A conditions and are expected to continue to experience free-flow LOS A conditions with the development of the Maybank Planned Development and the Standard. The northbound approach of the SC 700/Maybank Highway & Project Driveway intersection is projected to experience undesirable delay in the future with the development of the project site. It should be noted that the undesirable operating conditions for the SC 700/Maybank Highway & Project Driveway intersection will only impact residents and patrons of the Maybank Planned Development and the Standard. It is anticipated that future signalization of the SC 700/Maybank

Highway & Fleming Road intersection would attract additional trips from the Maybank Planned Development and the Standard, reducing the delay at the SC 700/Maybank Highway & Project Driveway intersection, as well as creating acceptable gaps for vehicles turning onto SC 700/Maybank Highway from the project site. Therefore, no improvements are recommended for the intersection at this time.

Worksheets documenting the intersection analyses are provided in Appendix D for 2016 Existing conditions, Appendix E for 2019 No Build conditions and Appendix F for 2019 Build conditions.

5.2 TURN LANE ANALYSIS

An analysis was conducted to determine the potential need for exclusive turn lanes for the proposed ingress movements at the existing project driveway intersection along Fleming Road. There is an existing right-turn lane along SC 700/Maybank Highway, which will accommodate the right-turn movement into the project. This analysis was conducted utilizing the criteria documented in SCDOT's *ARMS* manual and *Highway Design Manual* (2003).

The need for exclusive right-turn lanes is based upon the criteria documented in Section 15.5.1.1 of the *Highway Design Manual*, which consists of seven considerations. These considerations and applications for the existing project driveway along Fleming Road are listed below.

- 1) *at a free-flowing leg of any intersection on a two-lane urban or rural highway which satisfies the criteria in Figure 15.5A;*

Fleming Road meets the criteria; therefore, the project driveway was analyzed for an exclusive right-turn lane using Figure 15.5A. The project driveway does not meet the criteria during either peak period. Worksheets documenting the turn lane analysis are provided in Appendix G.

- 2) *at the free-flowing leg of any unsignalized intersection on a high-speed, four-lane urban or rural highway which satisfies the criteria in Figure 15.5B;*

The criteria are not applicable for Fleming Road.

- 3) *at any intersection where a capacity analysis determines a right-turn lane is necessary to meet the level-of-service criteria;*

As shown in Table 5.2, the intersection is projected to operate at an acceptable LOS without an exclusive right-turn lane.

- 4) *at any signalized intersection where the projected right-turning volume is greater than 300 vehicles per hour and where there is greater than 300 vehicles per hour per lane on the mainline;*

The intersection is not signalized and is not projected to experience greater than 300 right-turning vehicles per hour; therefore, this consideration is not applicable.

- 5) *for uniformity of intersection design along the highway if other intersections have right-turn lanes;*

There are no right-turn lanes along Fleming Road at nearby intersections; therefore, this consideration is not met.

- 6) *at railroad crossings where the railroad is paralleled to the facility and is located close to the intersection and where a right-turn lane would be desirable to store queued vehicles avoiding interference with the movement of through traffic; or*

The intersection is not near railroad facilities; therefore, this consideration is not applicable.

- 7) *at any intersection where the crash experience, existing traffic operations, sight distance restrictions, or engineering judgment indicates a significant conflict related to right turning vehicles.*

No issues with crashes, traffic operations, or sight distance are known; therefore, this consideration is not applicable.

Based on the *Highway Design Manual* considerations for the project driveways, an exclusive northbound right-turn lane along Fleming Road at the project driveway is not recommended at this time.

The existing right-turn lane along SC 700/Maybank Highway will serve the eastbound right-turn movement at the project driveway.

The need for exclusive left-turn lanes is based upon the criteria documented in Section 15.5.1.2 of the *Highway Design Manual*, which consists of six considerations. These considerations and applications for the proposed project driveway along Fleming Road are listed below. There is an existing two-way, left-turn lane along SC 700/Maybank Highway, which will accommodate the left-turn movement into the project.

- 1) *at any unsignalized intersection on a two-lane urban or rural highway which satisfies the criteria in Figures 15.5C, 15.5D, 15.5E, 15.5F, 15.5G;*

The criteria are not applicable for Fleming Road.

- 2) *at any signalized intersection. At locations where you have 300 vehicles per hour, consider a traffic review to determine if dual left-turn lanes are required;*

The project driveway intersection is not signalized; therefore, this consideration is not applicable.

- 3) *at all entrances to major residential, commercial and industrial developments;*

The development is not a major residential, commercial, or industrial development; therefore, this consideration is not applicable.

- 4) *at all median crossovers;*

There is no median along Fleming Road; therefore, this consideration is not applicable.

- 5) *for uniformity of intersection design along the highway if other intersections have left-turn lanes (i.e., to satisfy driver expectancy); or*

There are no other left-turn lanes along Fleming Road at nearby intersections; therefore, this consideration is not applicable.

- 6) *at any intersection where crash experience, traffic operations, sight distance restrictions (e.g., intersection beyond a crest vertical curve), or engineering judgment indicates a significant conflict related to left-turning vehicles.*

No issues with crashes, traffic operations, or sight distance are known; therefore, this consideration is not applicable.

Based on the *Highway Design Manual* considerations for the project driveways, an exclusive left-turn lane along Fleming Road at the project driveway is not recommended at this time.

The existing two-way left-turn lane along SC 700/Maybank Highway will serve the westbound left-turn movement at the project driveway.

6.0 Summary of Findings and Recommendations

A traffic impact analysis was conducted for the Maybank Planned Development in accordance with City of Charleston and SCDOT guidelines. The proposed Maybank Planned Development is located on the south side of SC 700/Maybank Highway between Fleming Road and Wappoo Creek Drive in the City of Charleston, South Carolina and is proposed to consist of 270 apartments.

Access to the development will be provided through one existing full access driveway along SC 700/Maybank Highway and one existing full access driveway along Fleming Road. These driveways will be shared with the adjacent development, The Standard.

The results of the signalized intersection analyses indicate that the study intersections currently operate and are expected to continue to operate at an acceptable LOS with consideration of the Maybank Planned Development, with one exception. The SC 700/Maybank Highway/Country Club Drive & SC 171/Folly Road intersection currently experiences LOS E conditions during the PM peak hour and is anticipated to experience LOS F conditions in the future, with or without the project. Project traffic is projected to be 1.8% of the total intersection traffic for the 2019 Build conditions. Due to the fact that the intersection is projected to operate at undesirable conditions and the minimal impact of the project traffic, no improvements are recommended at this time.

The results of the unsignalized intersection analyses show the SC 700/Maybank Highway approaches to the intersections with Fleming Road and the Project Driveway currently experience free-flow LOS A conditions and are expected to continue to experience free-flow LOS A conditions with the development of the project site. The northbound approach of the SC 700/Maybank Highway & Fleming Road intersection currently experiences LOS E conditions during the AM peak hour and is anticipated to experience LOS F conditions in the future with or without consideration of the Maybank Planned Development. The northbound approach of the SC 700/Maybank Highway & Project Driveway intersection is projected to experience undesirable delay in the future with the development of the project site. Future signalization of the SC 700/Maybank Highway & Fleming Road intersection would mitigate the undesirable condition at both intersections. Therefore, it is recommended that a signal warrant analysis be performed to determine if signal warrants would be met at the intersection of SC 700/Maybank Highway & Fleming Road upon completion of the Maybank Planned Development and The Standard.

Based on the *Highway Design Manual* considerations for the project driveways, exclusive ingress turn lanes along Fleming Road at the project driveway are not recommended at this time. The existing right-turn lane along SC 700/Maybank Highway will serve the eastbound right-turn movement at the project driveway and the existing two-way left-turn lane along SC 700/Maybank Highway will serve the westbound left-turn movement at the project driveway.

Appendix A

Trip Generation Worksheet

TRIP GENERATION ESTIMATES
Maybank Planned Development

Weekday Daily

TRIP GENERATION CHARACTERISTICS						DIRECT. DISTRIB.		GROSS TRIPS			INTERNAL CAPTURE TRIPS			PASS-BY CAPTURE TRIPS			NEW EXTERNAL TRIPS				
Land Use	Ed.	LUC	Scale	Unit	Equation/Rate	In	Out	In	Out	Total	%	In	Out	Trips	%	In	Out	Trips	In	Out	Total
Apartment	9th	220	278	DU	$T=6.06(X) + 123.56$	50%	50%	904	904	1,808	12%	113	113	226	0%	0	0	0	791	791	1,582
Shopping Center	9th	820	7.5	ksf	$\ln(T)=0.65 \ln(X) + 5.83$	50%	50%	631	630	1,261	18%	113	113	226	34%	176	176	352	342	341	683
Total:								1,535	1,534	3,069	15%	226	226	452	11%	176	176	352	1,133	1,132	2,265

Weekday AM Peak Hour

TRIP GENERATION CHARACTERISTICS						DIRECT. DISTRIB.		GROSS TRIPS			INTERNAL CAPTURE TRIPS			PASS-BY CAPTURE TRIPS			NEW EXTERNAL TRIPS				
Land Use	Ed.	LUC	Scale	Unit	Equation/Rate	In	Out	In	Out	Total	%	In	Out	Trips	%	In	Out	Trips	In	Out	Total
Apartment	9th	220	278	DU	$T=0.49(X) + 3.73$	20%	80%	28	112	140	1%	1	1	2	0%	0	0	0	27	111	138
Shopping Center	9th	820	7.5	ksf	$\ln(T)=0.61 \ln(X)+2.24$	62%	38%	20	12	32	6%	1	1	2	34%	5	5	10	14	6	20
Total:								48	124	172	2%	2	2	4	6%	5	5	10	41	117	158

Weekday PM Peak Hour

TRIP GENERATION CHARACTERISTICS						DIRECT. DISTRIB.		GROSS TRIPS			INTERNAL CAPTURE TRIPS			PASS-BY CAPTURE TRIPS			NEW EXTERNAL TRIPS				
Land Use	Ed.	LUC	Scale	Unit	Equation/Rate	In	Out	In	Out	Total	%	In	Out	Trips	%	In	Out	Trips	In	Out	Total
Apartment	9th	220	278	DU	$T=0.55(X) + 17.65$	65%	35%	111	60	171	11%	14	5	19	0%	0	0	0	97	55	152
Shopping Center	9th	820	7.5	ksf	$\ln(T)=0.67 \ln(X) + 3.31$	48%	52%	51	55	106	18%	5	14	19	34%	15	15	30	31	26	57
Total:								162	115	277	14%	19	19	38	11%	15	15	30	128	81	209

Appendix B

Traffic Count Data

Short Counts

735 Maryland St.
Columbia, SC 29201

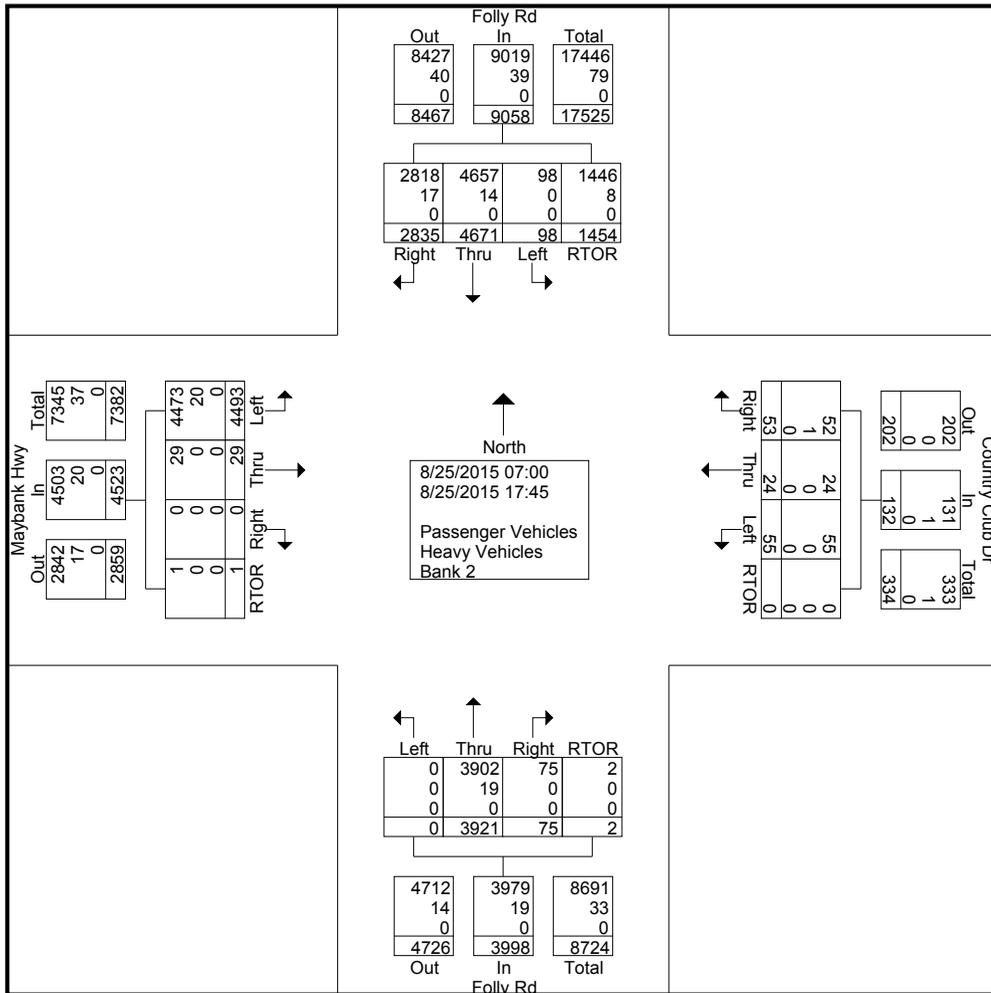
You Can Count On Us!

File Name : Folly Rd @ Maybank-Country Club

Site Code : 08252015

Start Date : 8/25/2015

Page No : 2



Short Counts

735 Maryland St.
Columbia, SC 29201

You Can Count On Us!

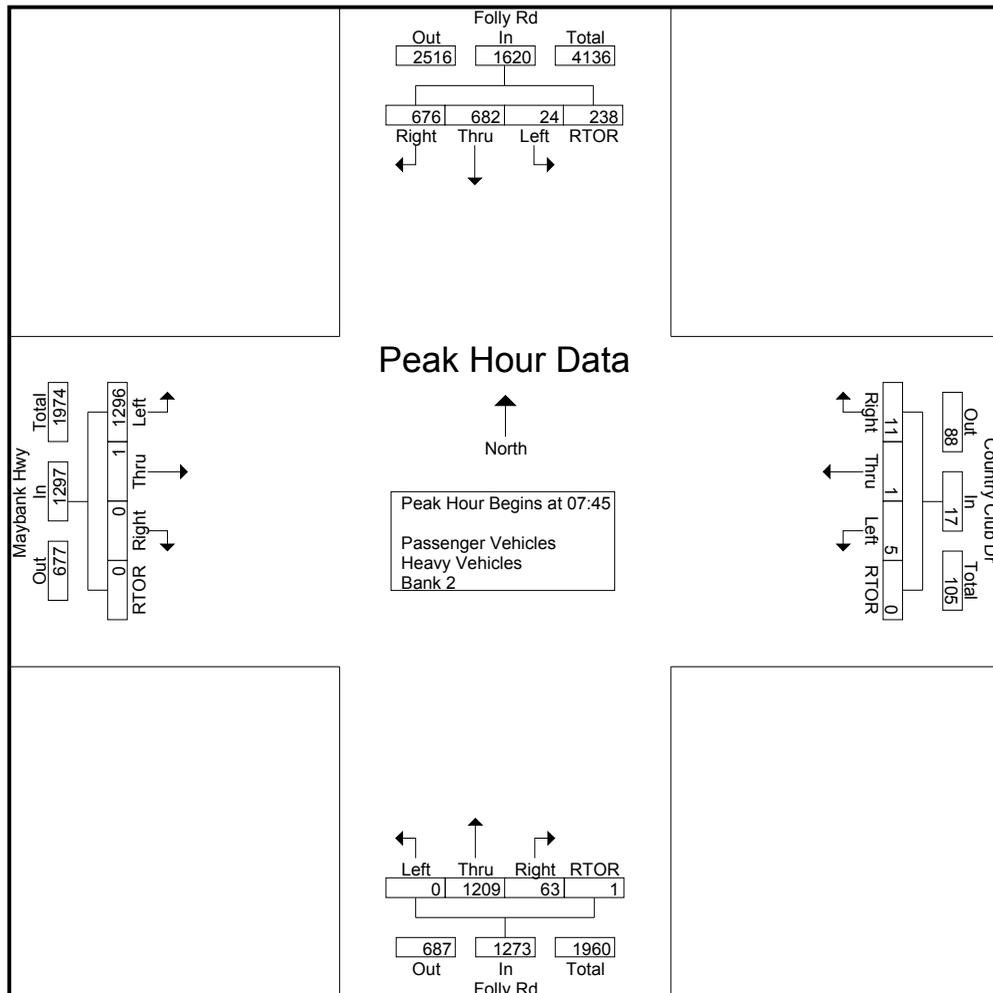
File Name : Folly Rd @ Maybank-Country Club

Site Code : 08252015

Start Date : 8/25/2015

Page No : 3

Start Time	Folly Rd Southbound					Country Club Dr Westbound					Folly Rd Northbound					Maybank Hwy Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	2	173	134	43	352	2	0	4	0	6	0	281	8	0	289	343	0	0	0	343	990
08:00	4	166	174	55	399	0	1	2	0	3	0	351	46	0	397	303	1	0	0	304	1103
08:15	5	137	185	82	409	2	0	1	0	3	0	296	3	1	300	352	0	0	0	352	1064
08:30	13	206	183	58	460	1	0	4	0	5	0	281	6	0	287	298	0	0	0	298	1050
Total Volume	24	682	676	238	1620	5	1	11	0	17	0	1209	63	1	1273	1296	1	0	0	1297	4207
% App. Total	1.5	42.1	41.7	14.7		29.4	5.9	64.7	0		0	95	4.9	0.1		99.9	0.1	0	0		
PHF	.462	.828	.914	.726	.880	.625	.250	.688	.000	.708	.000	.861	.342	.250	.802	.920	.250	.000	.000	.921	.954



Short Counts

735 Maryland St.
Columbia, SC 29201

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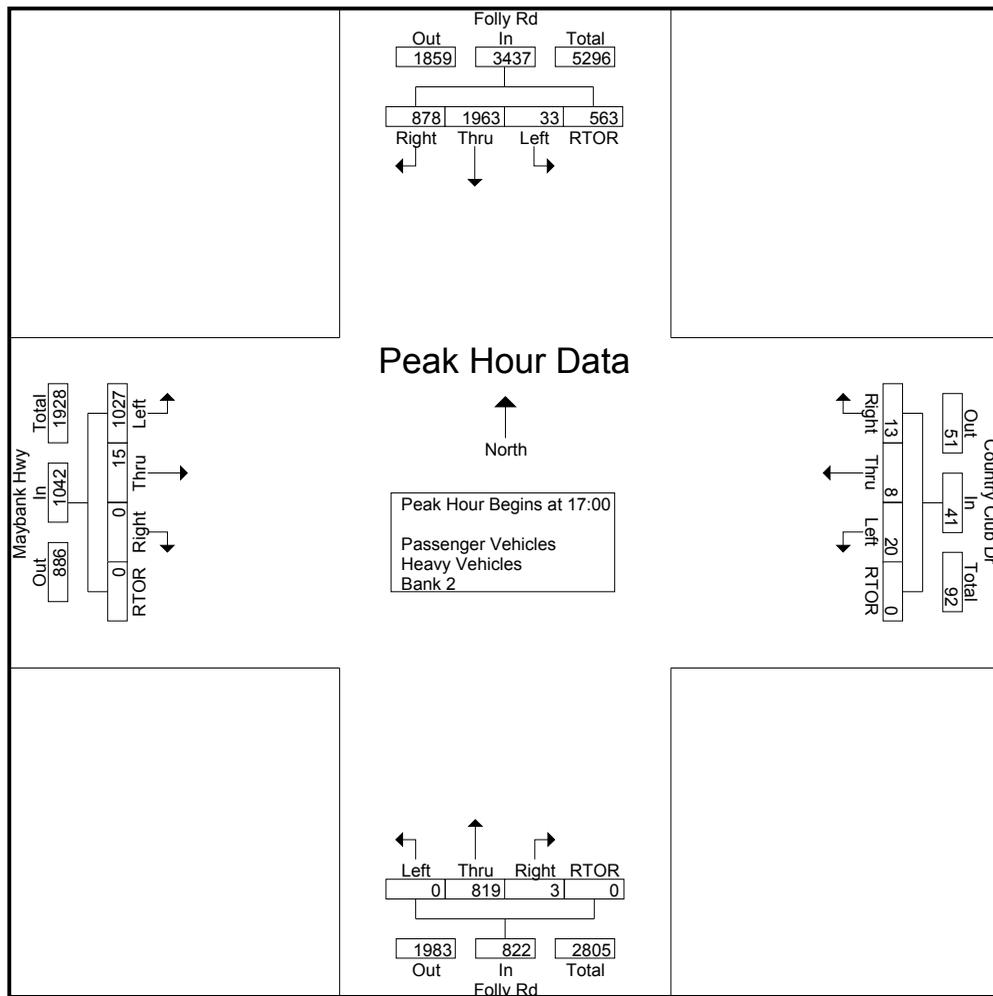
File Name : Folly Rd @ Maybank-Country Club

Site Code : 08252015

Start Date : 8/25/2015

Page No : 4

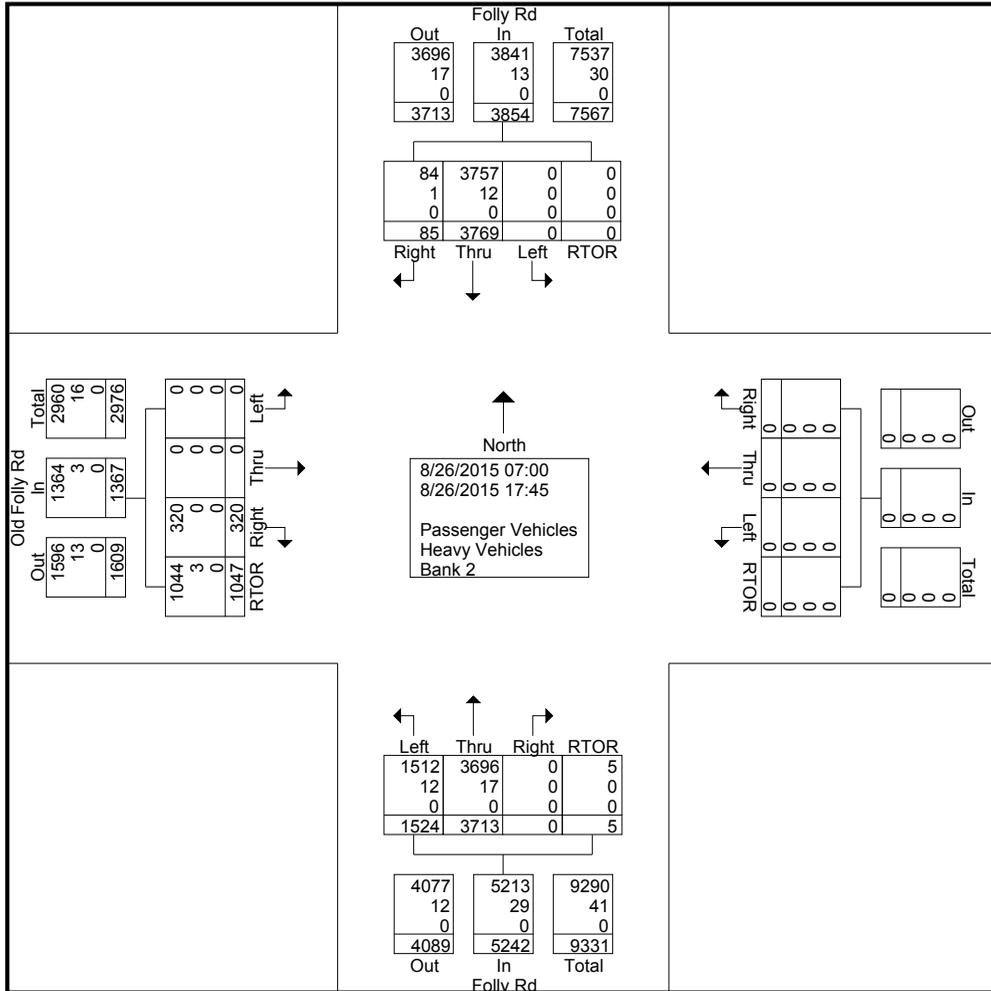
Start Time	Folly Rd Southbound					Country Club Dr Westbound					Folly Rd Northbound					Maybank Hwy Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	8	440	214	135	797	5	3	1	0	9	0	209	0	0	209	256	1	0	0	257	1272
17:15	10	454	219	134	817	7	0	6	0	13	0	211	0	0	211	272	0	0	0	272	1313
17:30	9	534	252	131	926	3	1	4	0	8	0	207	1	0	208	236	14	0	0	250	1392
17:45	6	535	193	163	897	5	4	2	0	11	0	192	2	0	194	263	0	0	0	263	1365
Total Volume	33	1963	878	563	3437	20	8	13	0	41	0	819	3	0	822	1027	15	0	0	1042	5342
% App. Total	1	57.1	25.5	16.4		48.8	19.5	31.7	0		0	99.6	0.4	0		98.6	1.4	0	0		
PHF	.825	.917	.871	.863	.928	.714	.500	.542	.000	.788	.000	.970	.375	.000	.974	.944	.268	.000	.000	.958	.959



Short Counts

735 Maryland St.
Columbia, SC 29201
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File Name : Folly Rd @ Old Folly Rd
Site Code : 08262015
Start Date : 8/26/2015
Page No : 2

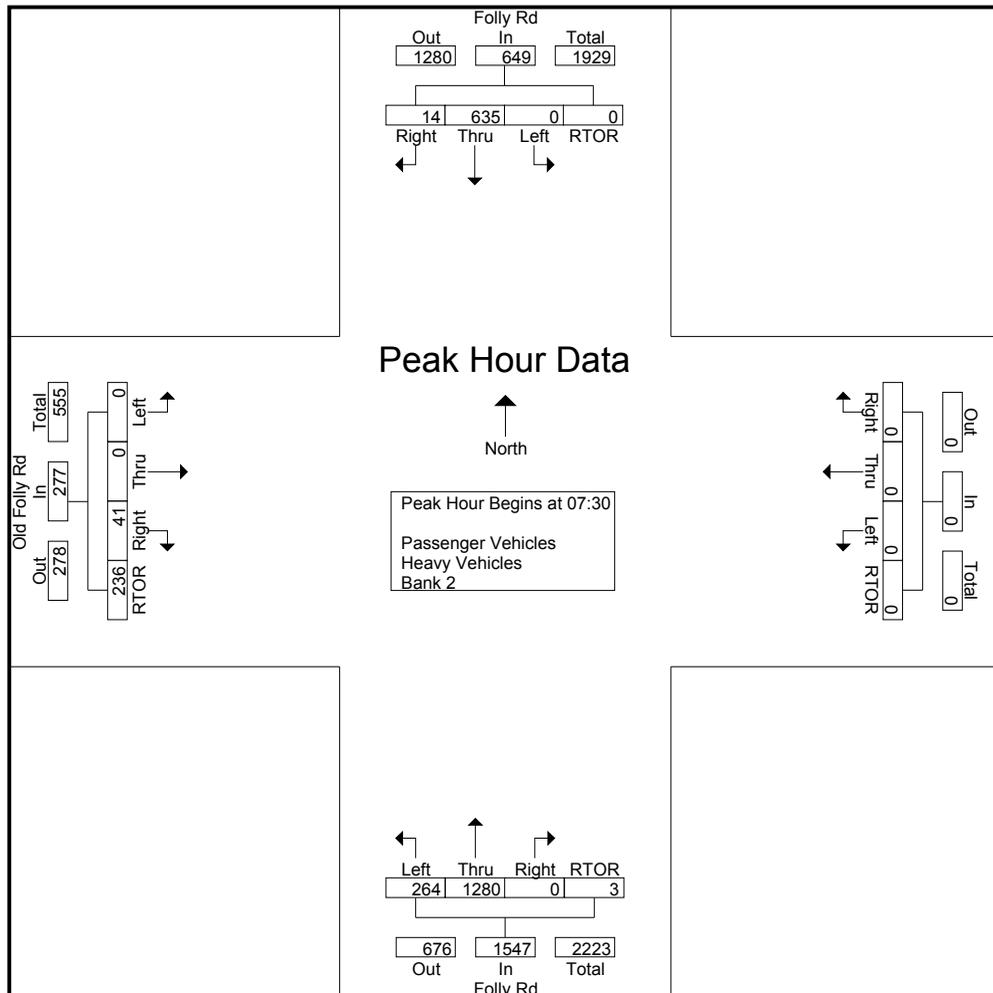


Short Counts

735 Maryland St.
Columbia, SC 29201
You Can Count On Us!

File Name : Folly Rd @ Old Folly Rd
Site Code : 08262015
Start Date : 8/26/2015
Page No : 3

Start Time	Folly Rd Southbound					Westbound					Folly Rd Northbound					Old Folly Rd Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	146	3	0	149	0	0	0	0	0	67	360	0	0	427	0	0	11	52	63	639
07:45	0	181	3	0	184	0	0	0	0	0	64	305	0	0	369	0	0	7	42	49	602
08:00	0	150	8	0	158	0	0	0	0	0	61	353	0	2	416	0	0	7	65	72	646
08:15	0	158	0	0	158	0	0	0	0	0	72	262	0	1	335	0	0	16	77	93	586
Total Volume	0	635	14	0	649	0	0	0	0	0	264	1280	0	3	1547	0	0	41	236	277	2473
% App. Total	0	97.8	2.2	0		0	0	0	0	0	17.1	82.7	0	0.2		0	0	14.8	85.2		
PHF	.000	.877	.438	.000	.882	.000	.000	.000	.000	.000	.917	.889	.000	.375	.906	.000	.000	.641	.766	.745	.957



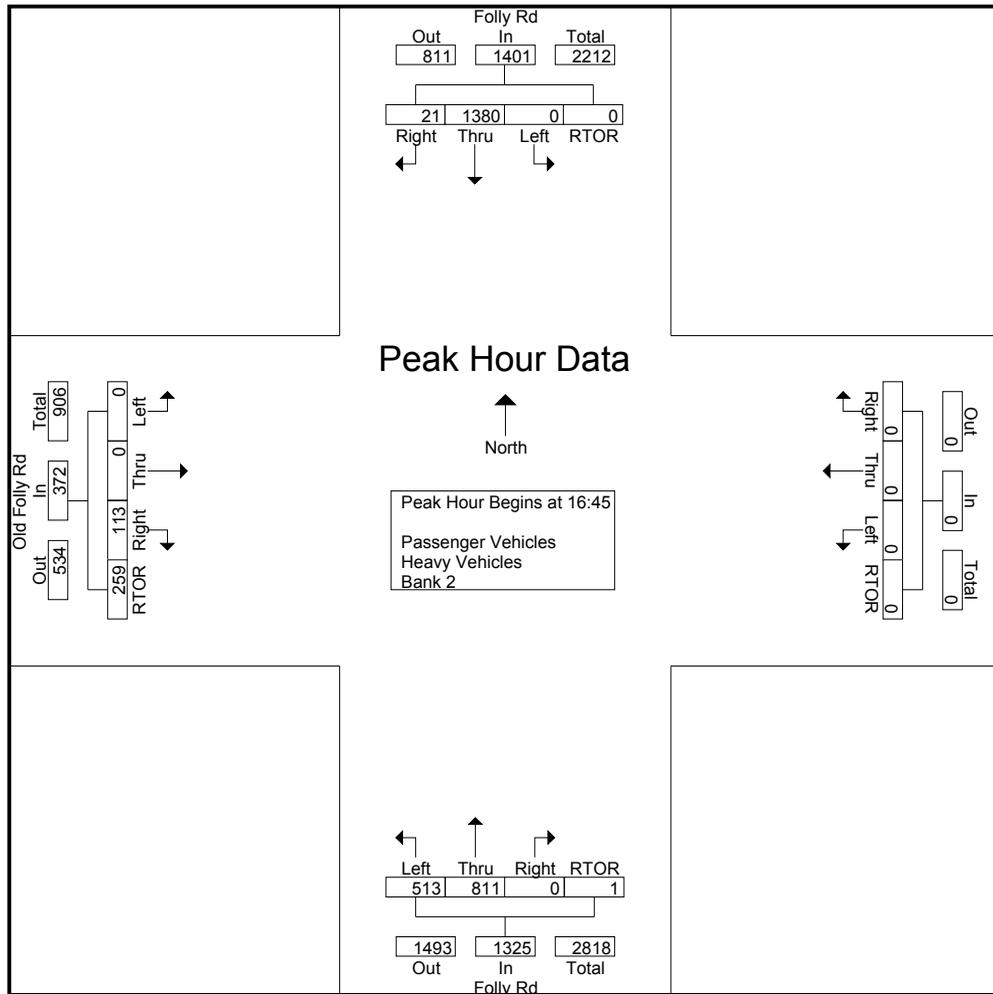
Short Counts

735 Maryland St.
Columbia, SC 29201
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File Name : Folly Rd @ Old Folly Rd
Site Code : 08262015
Start Date : 8/26/2015
Page No : 4

Start Time	Folly Rd Southbound					Westbound					Folly Rd Northbound					Old Folly Rd Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
16:45	0	322	1	0	323	0	0	0	0	0	127	197	0	0	324	0	0	29	49	78	725
17:00	0	330	8	0	338	0	0	0	0	0	139	231	0	1	371	0	0	24	65	89	798
17:15	0	324	9	0	333	0	0	0	0	0	127	204	0	0	331	0	0	29	86	115	779
17:30	0	404	3	0	407	0	0	0	0	0	120	179	0	0	299	0	0	31	59	90	796
Total Volume	0	1380	21	0	1401	0	0	0	0	0	513	811	0	1	1325	0	0	113	259	372	3098
% App. Total	0	98.5	1.5	0		0	0	0	0		38.7	61.2	0	0.1		0	0	30.4	69.6		
PHF	.000	.854	.583	.000	.861	.000	.000	.000	.000	.000	.923	.878	.000	.250	.893	.000	.000	.911	.753	.809	.971

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 16:45



Short Counts

735 Maryland St.
Columbia, SC 29201

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Default Comments
Change These in The Preferences Window
Select File/Preference in the Main Scree
Then Click the Comments Tab

File Name : Maybank @ Old Folly Rd
Site Code : 08252015
Start Date : 8/25/2015
Page No : 1

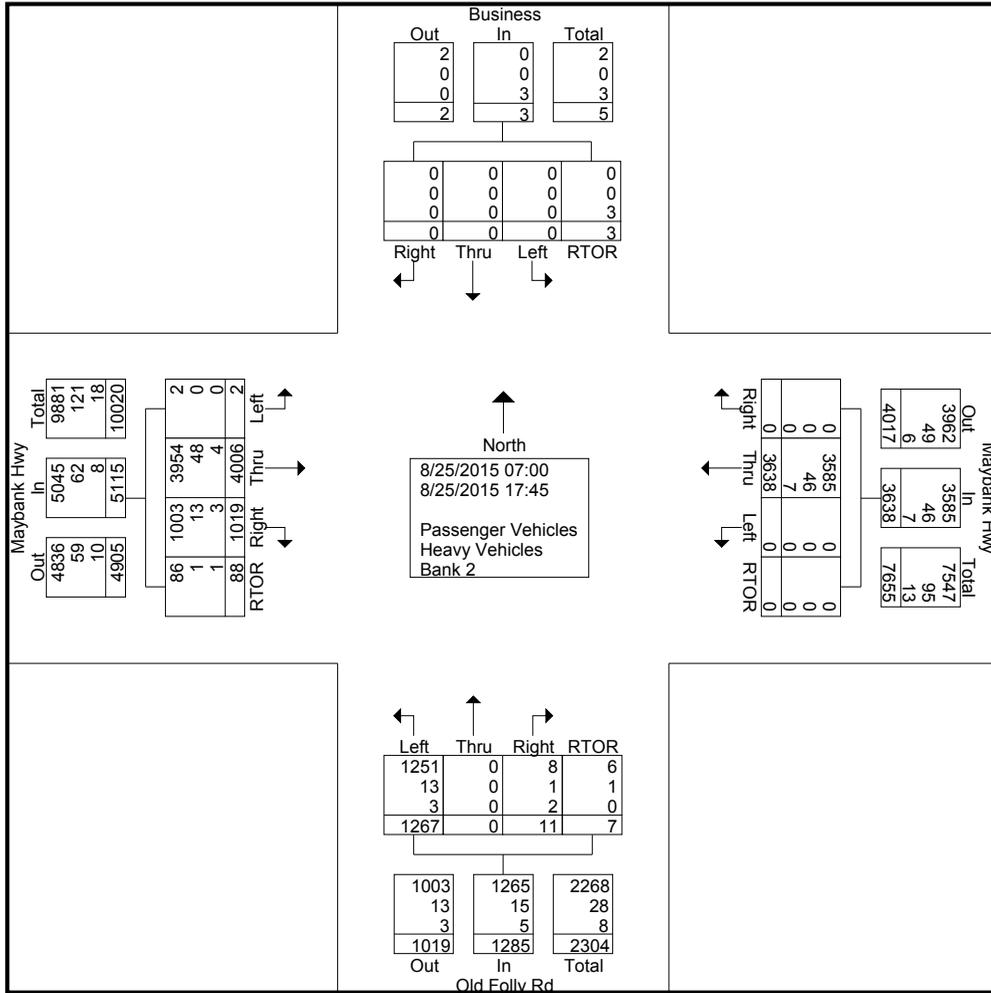
Groups Printed- Passenger Vehicles - Heavy Vehicles - Bank 2

Start Time	Business Southbound				Maybank Hwy Westbound				Old Folly Rd Northbound				Maybank Hwy Eastbound				Int. Total
	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	Left	Thru	Right	RTOR	
07:00	0	0	0	1	0	128	0	0	28	0	0	0	1	303	62	2	525
07:15	0	0	0	0	0	138	0	0	28	0	2	0	0	263	75	6	512
07:30	0	0	0	0	0	118	0	0	54	0	2	0	0	353	56	3	586
07:45	0	0	0	0	0	163	0	0	56	0	0	0	0	306	35	5	565
Total	0	0	0	1	0	547	0	0	166	0	4	0	1	1225	228	16	2188
08:00	0	0	0	0	0	141	0	0	59	0	0	0	0	295	57	6	558
08:15	0	0	0	1	0	171	0	0	56	0	1	0	0	272	63	10	574
08:30	0	0	0	0	0	167	0	0	68	0	1	0	0	278	65	9	588
08:45	0	0	0	1	0	133	0	0	63	0	0	0	0	196	59	7	459
Total	0	0	0	2	0	612	0	0	246	0	2	0	0	1041	244	32	2179
16:00	0	0	0	0	0	282	0	0	121	0	1	0	1	220	67	12	704
16:15	0	0	0	0	0	284	0	0	112	0	1	0	0	244	85	4	730
16:30	0	0	0	0	0	307	0	0	129	0	0	0	0	205	60	3	704
16:45	0	0	0	0	0	300	0	0	81	0	0	2	0	212	69	4	668
Total	0	0	0	0	0	1173	0	0	443	0	2	2	1	881	281	23	2806
17:00	0	0	0	0	0	313	0	0	112	0	1	0	0	236	67	4	733
17:15	0	0	0	0	0	321	0	0	109	0	0	0	0	219	68	6	723
17:30	0	0	0	0	0	335	0	0	88	0	1	5	0	226	61	1	717
17:45	0	0	0	0	0	337	0	0	103	0	1	0	0	178	70	6	695
Total	0	0	0	0	0	1306	0	0	412	0	3	5	0	859	266	17	2868
Grand Total	0	0	0	3	0	3638	0	0	1267	0	11	7	2	4006	1019	88	10041
Apprch %	0	0	0	100	0	100	0	0	98.6	0	0.9	0.5	0	78.3	19.9	1.7	
Total %	0	0	0	0	0	36.2	0	0	12.6	0	0.1	0.1	0	39.9	10.1	0.9	
Passenger Vehicles	0	0	0	0	0	3585	0	0	1251	0	8	6	2	3954	1003	86	9895
% Passenger Vehicles	0	0	0	0	0	98.5	0	0	98.7	0	72.7	85.7	100	98.7	98.4	97.7	98.5
Heavy Vehicles	0	0	0	0	0	46	0	0	13	0	1	1	0	48	13	1	123
% Heavy Vehicles	0	0	0	0	0	1.3	0	0	1	0	9.1	14.3	0	1.2	1.3	1.1	1.2
Bank 2	0	0	0	3	0	7	0	0	3	0	2	0	0	4	3	1	23
% Bank 2	0	0	0	100	0	0.2	0	0	0.2	0	18.2	0	0	0.1	0.3	1.1	0.2

Short Counts

735 Maryland St.
Columbia, SC 29201
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File Name : Maybank @ Old Folly Rd
Site Code : 08252015
Start Date : 8/25/2015
Page No : 2

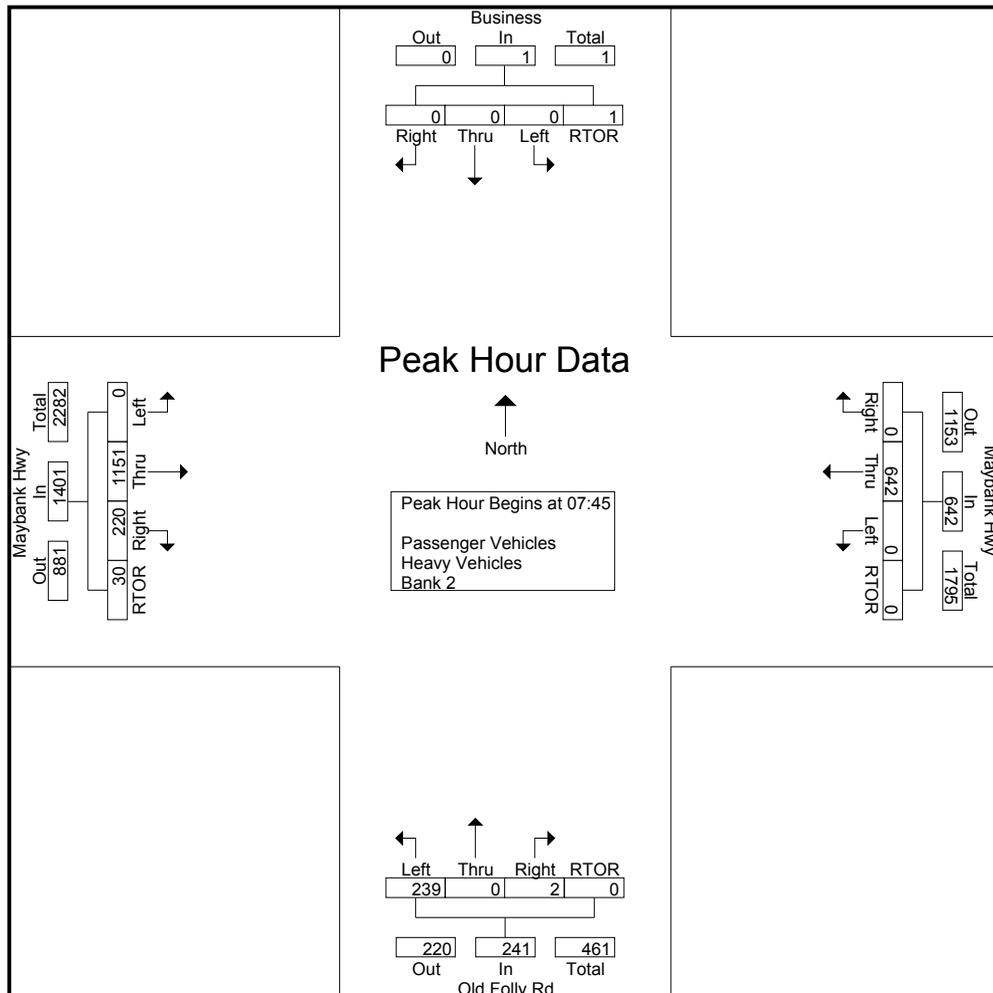


Short Counts

735 Maryland St.
Columbia, SC 29201
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File Name : Maybank @ Old Folly Rd
Site Code : 08252015
Start Date : 8/25/2015
Page No : 3

Start Time	Business Southbound					Maybank Hwy Westbound					Old Folly Rd Northbound					Maybank Hwy Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	0	0	0	0	0	0	163	0	0	163	56	0	0	0	56	0	306	35	5	346	565
08:00	0	0	0	0	0	0	141	0	0	141	59	0	0	0	59	0	295	57	6	358	558
08:15	0	0	0	1	1	0	171	0	0	171	56	0	1	0	57	0	272	63	10	345	574
08:30	0	0	0	0	0	0	167	0	0	167	68	0	1	0	69	0	278	65	9	352	588
Total Volume	0	0	0	1	1	0	642	0	0	642	239	0	2	0	241	0	1151	220	30	1401	2285
% App. Total	0	0	0	100		0	100	0	0		99.2	0	0.8	0		0	82.2	15.7	2.1		
PHF	.000	.000	.000	.250	.250	.000	.939	.000	.000	.939	.879	.000	.500	.000	.873	.000	.940	.846	.750	.978	.972



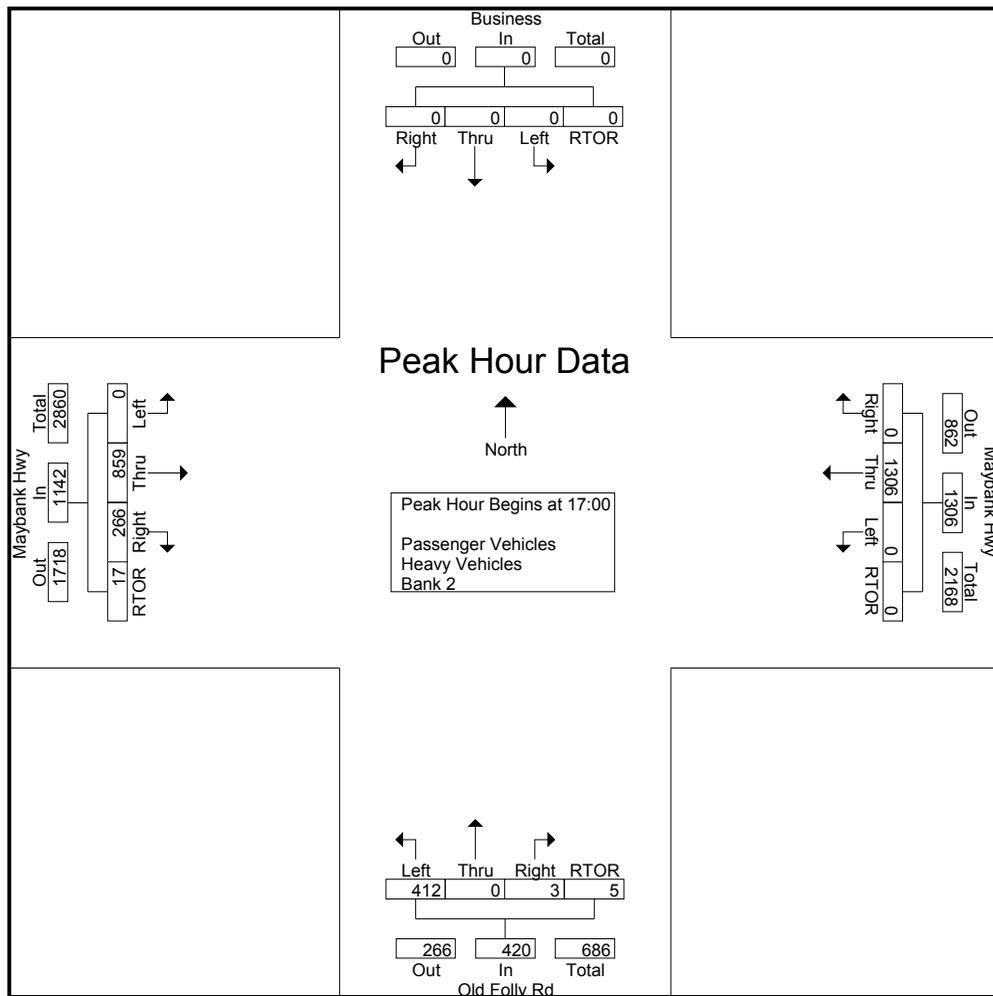
Short Counts

735 Maryland St.
Columbia, SC 29201
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File Name : Maybank @ Old Folly Rd
Site Code : 08252015
Start Date : 8/25/2015
Page No : 4

Start Time	Business Southbound					Maybank Hwy Westbound					Old Folly Rd Northbound					Maybank Hwy Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
17:00	0	0	0	0	0	0	313	0	0	313	112	0	1	0	113	0	236	67	4	307	733
17:15	0	0	0	0	0	0	321	0	0	321	109	0	0	0	109	0	219	68	6	293	723
17:30	0	0	0	0	0	0	335	0	0	335	88	0	1	5	94	0	226	61	1	288	717
17:45	0	0	0	0	0	0	337	0	0	337	103	0	1	0	104	0	178	70	6	254	695
Total Volume	0	0	0	0	0	0	1306	0	0	1306	412	0	3	5	420	0	859	266	17	1142	2868
% App. Total	0	0	0	0	0	0	100	0	0	100	98.1	0	0.7	1.2	100	0	75.2	23.3	1.5	100	100
PHF	.000	.000	.000	.000	.000	.000	.969	.000	.000	.969	.920	.000	.750	.250	.929	.000	.910	.950	.708	.930	.978

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 17:00



Short Counts

735 Maryland St.
Columbia, SC 29201

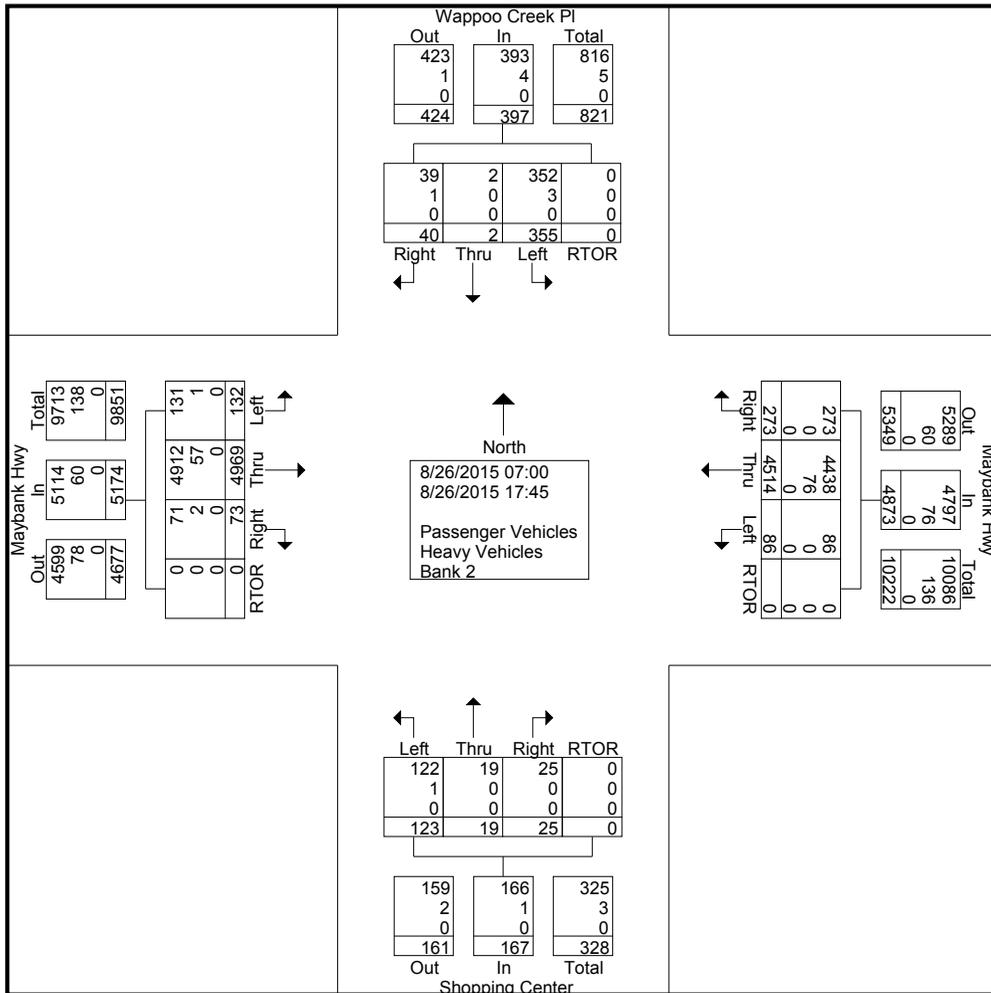
You Can Count On Us!

File Name : Maybank Hwy @ Wappoo Creek PI

Site Code : 08262015

Start Date : 8/26/2015

Page No : 2



Short Counts

735 Maryland St.
Columbia, SC 29201

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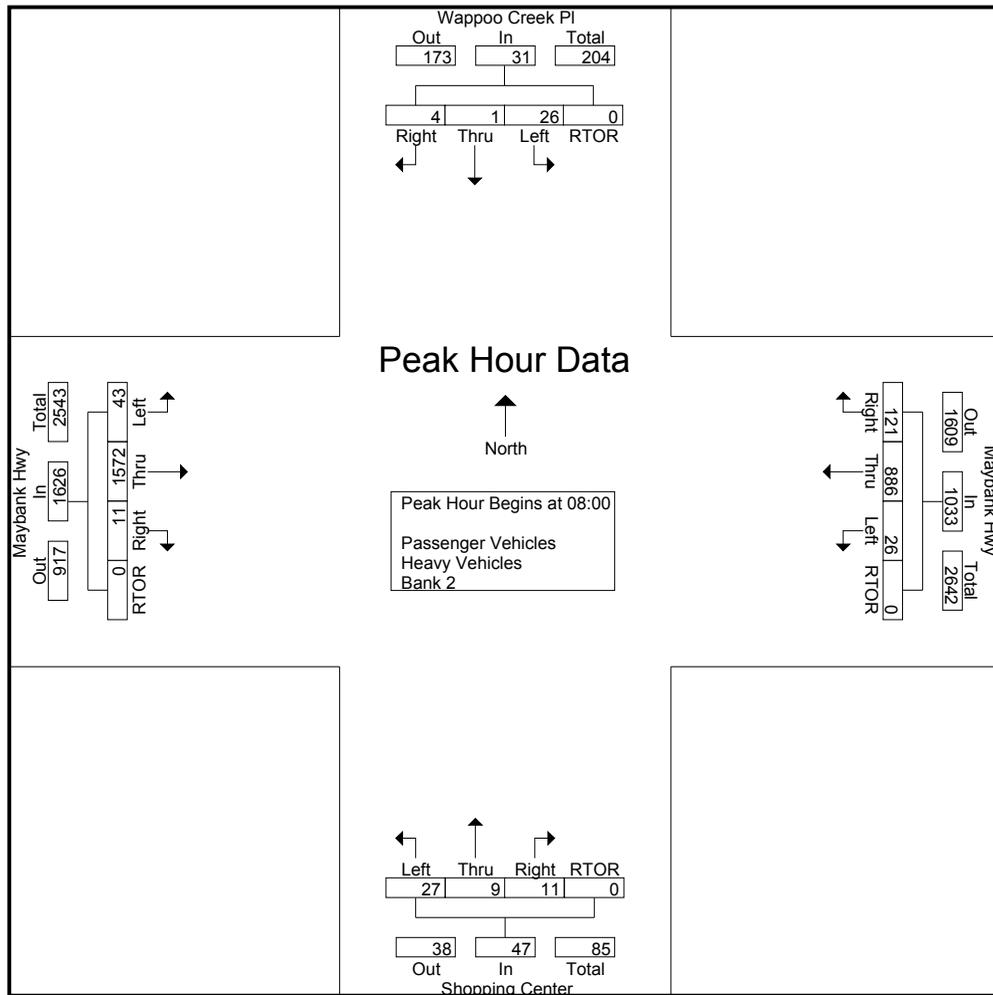
File Name : Maybank Hwy @ Wappoo Creek PI

Site Code : 08262015

Start Date : 8/26/2015

Page No : 3

Start Time	Wappoo Creek PI Southbound					Maybank Hwy Westbound					Shopping Center Northbound					Maybank Hwy Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	4	0	2	0	6	5	216	14	0	235	5	1	4	0	10	15	411	4	0	430	681
08:15	7	0	1	0	8	6	259	27	0	292	6	5	1	0	12	5	426	2	0	433	745
08:30	9	1	1	0	11	10	229	30	0	269	6	1	4	0	11	14	380	3	0	397	688
08:45	6	0	0	0	6	5	182	50	0	237	10	2	2	0	14	9	355	2	0	366	623
Total Volume	26	1	4	0	31	26	886	121	0	1033	27	9	11	0	47	43	1572	11	0	1626	2737
% App. Total	83.9	3.2	12.9	0		2.5	85.8	11.7	0		57.4	19.1	23.4	0		2.6	96.7	0.7	0		
PHF	.722	.250	.500	.000	.705	.650	.855	.605	.000	.884	.675	.450	.688	.000	.839	.717	.923	.688	.000	.939	.918



Short Counts

735 Maryland St.
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File Name : Maybank Hwy @ Wappoo Creek PI

Site Code : 08262015

Start Date : 8/26/2015

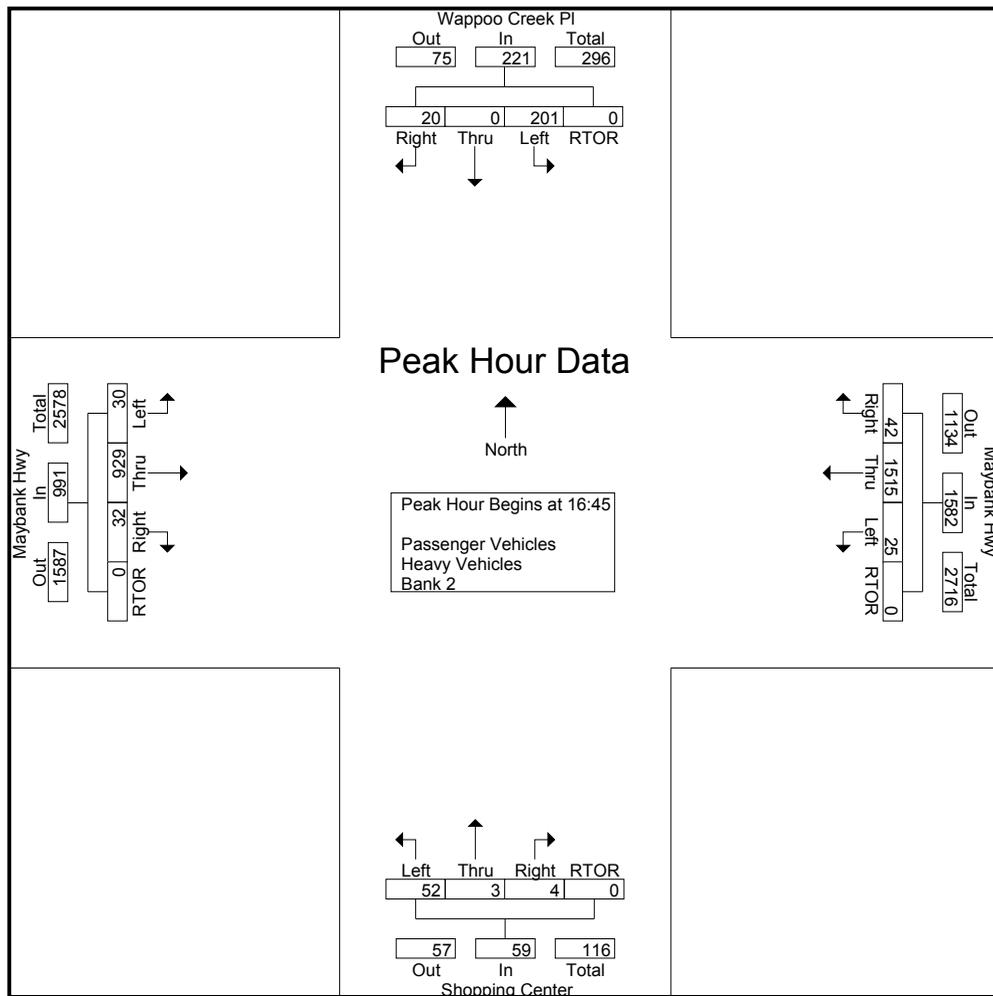
Page No : 4

Start Time	Wappoo Creek PI Southbound					Maybank Hwy Westbound					Shopping Center Northbound					Maybank Hwy Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:45

16:45	70	0	3	0	73	7	347	11	0	365	12	1	1	0	14	4	202	8	0	214	666
17:00	52	0	9	0	61	8	383	12	0	403	13	0	2	0	15	11	273	9	0	293	772
17:15	38	0	6	0	44	3	386	7	0	396	8	2	0	0	10	9	227	9	0	245	695
17:30	41	0	2	0	43	7	399	12	0	418	19	0	1	0	20	6	227	6	0	239	720
Total Volume	201	0	20	0	221	25	1515	42	0	1582	52	3	4	0	59	30	929	32	0	991	2853
% App. Total	91	0	9	0		1.6	95.8	2.7	0		88.1	5.1	6.8	0		3	93.7	3.2	0		
PHF	.718	.000	.556	.000	.757	.781	.949	.875	.000	.946	.684	.375	.500	.000	.738	.682	.851	.889	.000	.846	.924



Short Counts

735 Maryland St.
Columbia, SC 29201

You Can Count On Us!

Default Comments

Change These in The Preferences Window

Select File/Preference in the Main Scree

Then Click the Comments Tab

File Name : Maybank @ Fleming

Site Code : 01162013

Start Date : 1/16/2013

Page No : 1

Groups Printed- Unshifted

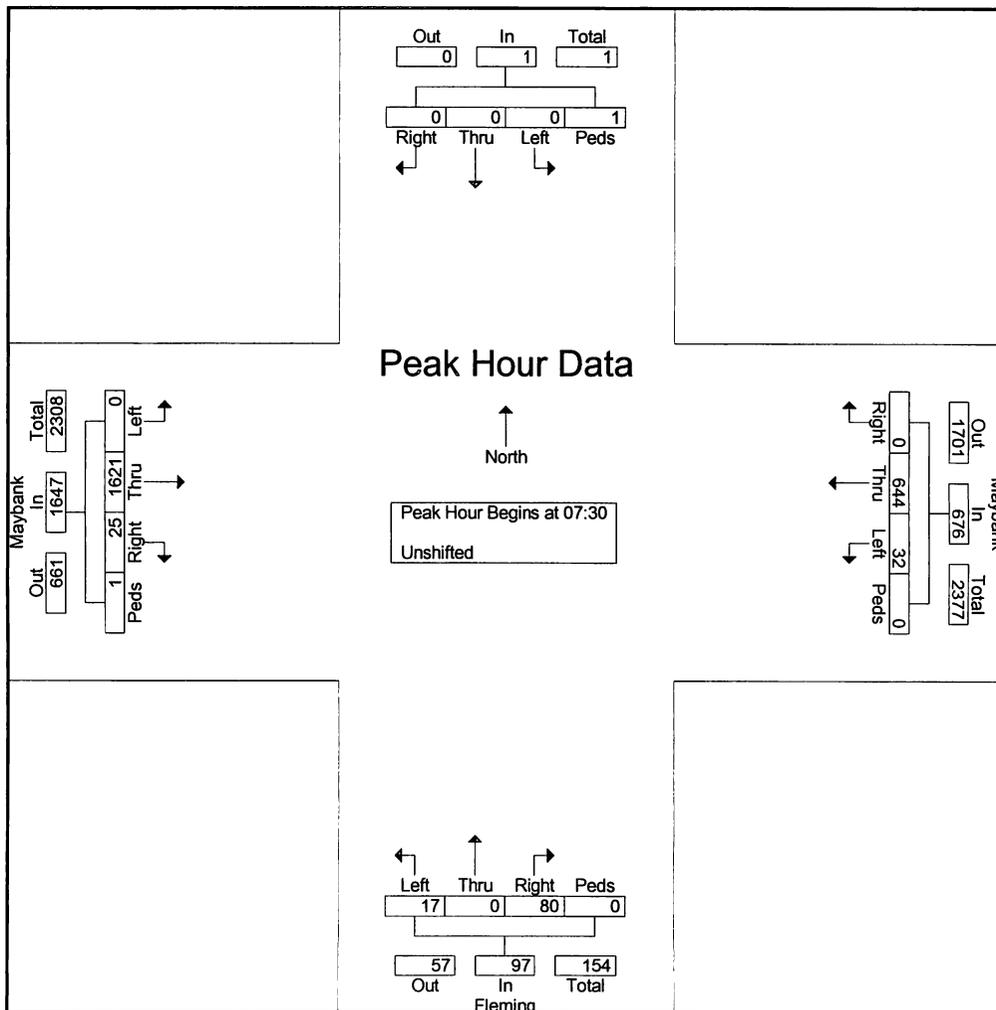
Start Time	Southbound				Maybank Westbound				Fleming Northbound				Maybank Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	0	0	0	0	9	110	0	1	6	0	6	0	0	290	5	0	427
07:15	0	0	0	0	13	108	0	0	4	0	12	0	0	365	10	0	512
07:30	0	0	0	0	11	159	0	0	4	0	18	0	0	418	3	0	613
07:45	0	0	0	0	7	136	0	0	3	0	20	0	0	437	10	0	613
Total	0	0	0	0	40	513	0	1	17	0	56	0	0	1510	28	0	2165
08:00	0	0	0	0	9	189	0	0	7	0	26	0	0	388	11	0	630
08:15	0	0	0	1	5	160	0	0	3	0	16	0	0	378	1	1	565
08:30	0	0	0	0	10	143	0	0	5	0	15	0	0	399	3	0	575
08:45	0	0	0	0	6	164	0	0	3	0	15	0	0	303	6	0	497
Total	0	0	0	1	30	656	0	0	18	0	72	0	0	1468	21	1	2267
16:00	0	0	0	0	18	275	0	0	7	0	19	0	0	201	3	0	523
16:15	0	0	0	0	18	307	0	0	9	0	14	0	0	177	15	0	540
16:30	0	0	0	0	15	284	0	0	9	0	19	0	0	203	6	0	536
16:45	0	0	0	0	10	338	0	0	7	0	15	0	0	207	8	0	585
Total	0	0	0	0	61	1204	0	0	32	0	67	0	0	788	32	0	2184
17:00	0	0	0	0	17	330	0	0	10	0	12	0	0	208	12	0	589
17:15	0	0	0	0	15	335	0	0	15	0	15	0	0	207	10	0	597
17:30	0	0	0	0	15	372	0	0	9	0	13	0	0	263	5	0	677
17:45	0	0	0	0	20	398	0	0	11	0	13	0	0	209	9	0	660
Total	0	0	0	0	67	1435	0	0	45	0	53	0	0	887	36	0	2523
Grand Total	0	0	0	1	198	3808	0	1	112	0	248	0	0	4653	117	1	9139
Apprch %	0	0	0	100	4.9	95	0	0	31.1	0	68.9	0	0	97.5	2.5	0	
Total %	0	0	0	0	2.2	41.7	0	0	1.2	0	2.7	0	0	50.9	1.3	0	

Short Counts

735 Maryland St.
Columbia, SC 29201
You Can Count On Us!

File Name : Maybank @ Fleming
Site Code : 01162013
Start Date : 1/16/2013
Page No : 3

Start Time	Southbound					Maybank Westbound					Fleming Northbound					Maybank Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	0	0	0	0	11	159	0	0	170	4	0	18	0	22	0	418	3	0	421	613
07:45	0	0	0	0	0	7	136	0	0	143	3	0	20	0	23	0	437	10	0	447	613
08:00	0	0	0	0	0	9	189	0	0	198	7	0	26	0	33	0	388	11	0	399	630
08:15	0	0	0	1	1	5	160	0	0	165	3	0	16	0	19	0	378	1	1	380	565
Total Volume	0	0	0	1	1	32	644	0	0	676	17	0	80	0	97	0	1621	25	1	1647	2421
% App. Total	0	0	0	100		4.7	95.3	0	0		17.5	0	82.5	0		0	98.4	1.5	0.1		
PHF	.000	.000	.000	.250	.250	.727	.852	.000	.000	.854	.607	.000	.769	.000	.735	.000	.927	.568	.250	.921	.961

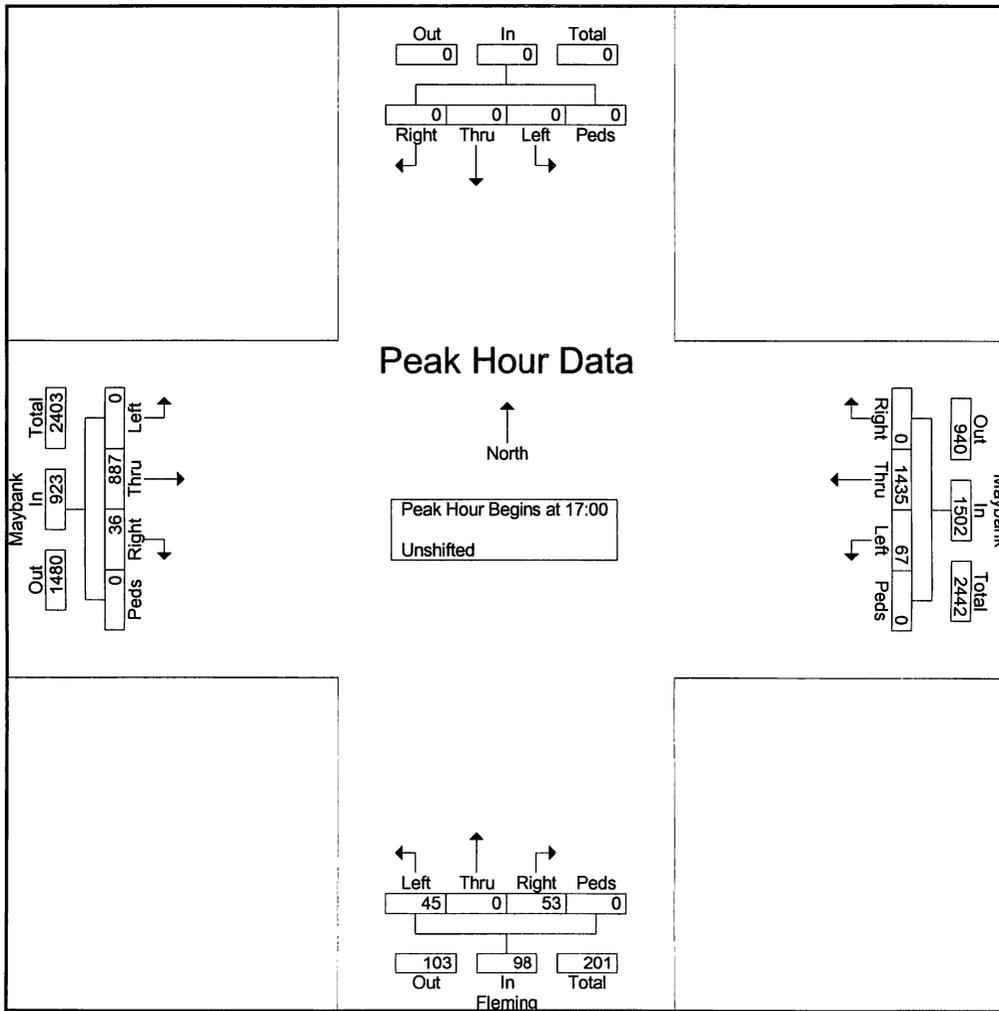


Short Counts

735 Maryland St.
Columbia, SC 29201
You Can Count On Us!

File Name : Maybank @ Fleming
Site Code : 01162013
Start Date : 1/16/2013
Page No : 4

Start Time	Southbound					Maybank Westbound					Fleming Northbound					Maybank Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	17	330	0	0	347	10	0	12	0	22	0	208	12	0	220	589
17:15	0	0	0	0	0	15	335	0	0	350	15	0	15	0	30	0	207	10	0	217	597
17:30	0	0	0	0	0	15	372	0	0	387	9	0	13	0	22	0	263	5	0	268	677
17:45	0	0	0	0	0	20	398	0	0	418	11	0	13	0	24	0	209	9	0	218	660
Total Volume	0	0	0	0	0	67	1435	0	0	1502	45	0	53	0	98	0	887	36	0	923	2523
% App. Total	0	0	0	0	0	4.5	95.5	0	0		45.9	0	54.1	0		0	96.1	3.9	0		
PHF	.000	.000	.000	.000	.000	.838	.901	.000	.000	.898	.750	.000	.883	.000	.817	.000	.843	.750	.000	.861	.932



Appendix C

Traffic Volume Development Worksheets

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Maybank Highway & Fleming Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED:

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES		1654	26	33	657		17		82			
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	17	0	0	7	0	0	0	1	0	0	0
2016 TRAFFIC VOLUMES	0	1671	26	33	664	0	17	0	83	0	0	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	51	1	1	20	0	1	0	3	0	0	0
Vested Traffic		25	5		35		17		20			
2019 NO-BUILD TRAFFIC VOLUMES	0	1,746	32	34	719	0	35	0	105	0	0	0
New Project Traffic		10			10		19					
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	1,756	32	34	729	0	54	0	105	0	0	0

PM PEAK HOUR (4:15-5:15 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES		905	37	68	1464		46		54			
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	9	0	1	15	0	0	0	1	0	0	0
2016 TRAFFIC VOLUMES	0	914	37	69	1479	0	46	0	55	0	0	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	28	1	2	45	0	1	0	2	0	0	0
Vested Traffic		47	17		35		9		11			
2019 NO-BUILD TRAFFIC VOLUMES	0	989	56	71	1,558	0	57	0	67	0	0	0
New Project Traffic		32			7		13					
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	1,021	56	71	1,565	0	70	0	67	0	0	0

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Maybank Highway & Project Driveway

TRAFFIC CONTROL: Unsignalized

DATE COUNTED:

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES		1626			917							
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	16	0	0	9	0	0	0	0	0	0	0
2016 TRAFFIC VOLUMES	0	1642	0	0	926	0	0	0	0	0	0	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	50	0	0	28	0	0	0	0	0	0	0
Vested Traffic		20	25	40			35		79			
2019 NO-BUILD TRAFFIC VOLUMES	0	1,712	25	40	954	0	35	0	79	0	0	0
New Project Traffic			10	31			10		88			
Pass-By Project Traffic		-3	3	2	-2		2		3			
2019 BUILD TRAFFIC VOLUMES	0	1,709	38	73	952	0	47	0	170	0	0	0

PM PEAK HOUR (4:15-5:15 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES		991			1587							
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	10	0	0	16	0	0	0	0	0	0	0
2016 TRAFFIC VOLUMES	0	1001	0	0	1603	0	0	0	0	0	0	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	30	0	0	49	0	0	0	0	0	0	0
Vested Traffic		11	47	109			35		59			
2019 NO-BUILD TRAFFIC VOLUMES	0	1,042	47	109	1,651	0	35	0	59	0	0	0
New Project Traffic			32	96			7		61			
Pass-By Project Traffic		-8	8	7	-7		7		8			
2019 BUILD TRAFFIC VOLUMES	0	1,034	87	212	1,644	0	49	0	128	0	0	0

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Maybank Highway & Wappoo Creek Drive

TRAFFIC CONTROL: Signalized

DATE COUNTED: Wednesday August 26, 2015

AM PEAK HOUR (8:00-9:00 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	43	1572	11	26	886	121	27	9	11	26	1	4
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	16	0	0	9	1	0	0	0	0	0	0
2016 TRAFFIC VOLUMES	43	1588	11	26	895	122	27	9	11	26	1	4
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	1	48	0	1	27	4	1	0	0	1	0	0
Vested Traffic		99			40							
2019 NO-BUILD TRAFFIC VOLUMES	45	1,735	11	27	962	126	28	9	11	27	1	4
New Project Traffic		88			31							
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	45	1,823	11	27	993	126	28	9	11	27	1	4

PM PEAK HOUR (4:15-5:15 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	30	929	32	25	1515	42	52	3	4	201	0	20
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	9	0	0	15	0	1	0	0	2	0	0
2016 TRAFFIC VOLUMES	30	938	32	25	1530	42	53	3	4	203	0	20
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	1	28	1	1	46	1	2	0	0	6	0	1
Vested Traffic		70			109							
2019 NO-BUILD TRAFFIC VOLUMES	31	1,037	33	26	1,686	44	54	3	4	209	0	21
New Project Traffic		61			96							
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	31	1,098	33	26	1,782	44	54	3	4	209	0	21

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Maybank Highway & Old Folly Road

TRAFFIC CONTROL: Signalized

DATE COUNTED: Tuesday August 25, 2015

AM PEAK HOUR (7:45-8:45 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	0	1151	250	0	642	0	239	0	2	0	0	0
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	12	3	0	6	0	2	0	0	0	0	0
2016 TRAFFIC VOLUMES	0	1163	253	0	648	0	241	0	2	0	0	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	35	8	0	20	0	7	0	0	0	0	0
Vested Traffic		66	33		27		13					
2019 NO-BUILD TRAFFIC VOLUMES	0	1,264	293	0	695	0	262	0	2	0	0	0
New Project Traffic		59	29		21		10					
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	1,323	322	0	716	0	272	0	2	0	0	0

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	0	859	283	0	1306	0	412	0	8	0	0	0
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	9	3	0	13	0	4	0	0	0	0	0
2016 TRAFFIC VOLUMES	0	868	286	0	1319	0	416	0	8	0	0	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	26	9	0	40	0	13	0	0	0	0	0
Vested Traffic		47	23		73		36					
2019 NO-BUILD TRAFFIC VOLUMES	0	941	317	0	1,432	0	465	0	8	0	0	0
New Project Traffic		41	20		64		32					
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	982	337	0	1,496	0	497	0	8	0	0	0

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Maybank Highway & Folly Road

TRAFFIC CONTROL: Signalized

DATE COUNTED: Tuesday August 25, 2015

AM PEAK HOUR (7:45-8:45 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	1296	1	0	5	1	11	0	1209	64	24	682	914
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	13	0	0	0	0	0	0	12	1	0	7	9
2016 TRAFFIC VOLUMES	1309	1	0	5	1	11	0	1221	65	24	689	923
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	40	0	0	0	0	0	0	37	2	1	21	28
Vested Traffic	66											27
2019 NO-BUILD TRAFFIC VOLUMES	1,415	1	0	5	1	11	0	1,258	67	25	710	978
New Project Traffic	59											21
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	1,474	1	0	5	1	11	0	1,258	67	25	710	999

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	1027	15	0	20	8	13	0	819	3	33	1963	1441
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	10	0	0	0	0	0	0	8	0	0	20	14
2016 TRAFFIC VOLUMES	1037	15	0	20	8	13	0	827	3	33	1983	1455
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	31	0	0	1	0	0	0	25	0	1	60	44
Vested Traffic	47											73
2019 NO-BUILD TRAFFIC VOLUMES	1,116	16	0	21	8	14	0	852	3	34	2,043	1,573
New Project Traffic	41											64
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	1,157	16	0	21	8	14	0	852	3	34	2,043	1,637

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Old Folly Road & Folly Road

TRAFFIC CONTROL: Signalized

DATE COUNTED: Wednesday August 26, 2015

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	0	0	277	0	0	0	264	1280	0	0	635	14
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	3	0	0	0	3	13	0	0	6	0
2016 TRAFFIC VOLUMES	0	0	280	0	0	0	267	1293	0	0	641	14
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	8	0	0	0	8	39	0	0	19	0
Vested Traffic			33				13					
2019 NO-BUILD TRAFFIC VOLUMES	0	0	321	0	0	0	288	1,332	0	0	661	15
New Project Traffic			29				10					
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	0	350	0	0	0	298	1,332	0	0	661	15

PM PEAK HOUR (4:45-5:45 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2015 TRAFFIC VOLUMES	0	0	372	0	0	0	513	811	0	0	1380	21
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	4	0	0	0	5	8	0	0	14	0
2016 TRAFFIC VOLUMES	0	0	376	0	0	0	518	819	0	0	1394	21
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	11	0	0	0	16	25	0	0	42	1
Vested Traffic			23				36					
2019 NO-BUILD TRAFFIC VOLUMES	0	0	410	0	0	0	570	844	0	0	1,436	22
New Project Traffic			20				32					
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	0	430	0	0	0	602	844	0	0	1,436	22

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Fleming Road & Project Driveway

TRAFFIC CONTROL: Unsignalized

DATE COUNTED:

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2016 TRAFFIC VOLUMES								99			59	
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	1	0	0	1	0
2016 TRAFFIC VOLUMES	0	0	0	0	0	0	0	100	0	0	60	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	3	0	0	2	0
Vested Traffic						37				5		
2019 NO-BUILD TRAFFIC VOLUMES	0	0	0	0	0	37	0	103	0	5	61	0
New Project Traffic						19						
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	0	0	0	0	56	0	103	0	5	61	0

PM PEAK HOUR (4:15-5:15 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2016 TRAFFIC VOLUMES								100			105	
Years To Current (2016)	1	1	1	1	1	1	1	1	1	1	1	1
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	1	0	0	1	0
2016 TRAFFIC VOLUMES	0	0	0	0	0	0	0	101	0	0	106	0
Years To Buildout (2019)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	3	0	0	3	0
Vested Traffic						20				17		
2019 NO-BUILD TRAFFIC VOLUMES	0	0	0	0	0	20	0	104	0	17	109	0
New Project Traffic						13						
Pass-By Project Traffic												
2019 BUILD TRAFFIC VOLUMES	0	0	0	0	0	33	0	104	0	17	109	0

Appendix D

Analysis Worksheets (2016 Existing Conditions)

Intersection

Int Delay, s/veh 2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1671	26	33	664	17	83
Future Vol, veh/h	1671	26	33	664	17	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1857	29	37	738	19	92

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1886
Stage 1	-	-	1871
Stage 2	-	-	442
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	314
Stage 1	-	-	107
Stage 2	-	-	615
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	314
Mov Cap-2 Maneuver	-	-	88
Stage 1	-	-	107
Stage 2	-	-	543

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	44.6
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	197	-	-	314	-
HCM Lane V/C Ratio	0.564	-	-	0.117	-
HCM Control Delay (s)	44.6	-	-	18	-
HCM Lane LOS	E	-	-	C	-
HCM 95th %tile Q(veh)	3	-	-	0.4	-

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	0	100	0	0	60
Future Vol, veh/h	0	0	100	0	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	111	0	0	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	178	111	0	0	111	0
Stage 1	111	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	812	942	-	-	1479	-
Stage 1	914	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	812	942	-	-	1479	-
Mov Cap-2 Maneuver	812	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	0		0		0
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1479
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1642	0	0	926	0	0
Future Vol, veh/h	1642	0	0	926	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1824	0	0	1029	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1824
Stage 1	-	-	1824
Stage 2	-	-	514
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	332
Stage 1	-	-	114
Stage 2	-	-	565
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	332
Mov Cap-2 Maneuver	-	-	94
Stage 1	-	-	114
Stage 2	-	-	565

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	332	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

HCM 2010 Signalized Intersection Summary
 4: Harris Teeter Shopping Center/Wappoo Creek Dr. & Maybank Hwy

2016 Existing Conditions
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1588	11	26	895	122	27	9	11	26	1	4
Future Volume (veh/h)	43	1588	11	26	895	122	27	9	11	26	1	4
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	47	1726	12	28	973	133	29	10	12	28	1	4
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	420	2386	17	246	2344	1049	181	41	32	275	7	141
Arrive On Green	0.66	0.66	0.66	0.66	0.66	0.66	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	508	3603	25	277	3539	1583	718	464	364	1443	82	1583
Grp Volume(v), veh/h	47	847	891	28	973	133	51	0	0	29	0	4
Grp Sat Flow(s),veh/h/ln	508	1770	1858	277	1770	1583	1546	0	0	1526	0	1583
Q Serve(g_s), s	2.3	15.0	15.0	3.5	6.2	1.5	0.7	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	8.5	15.0	15.0	18.5	6.2	1.5	1.4	0.0	0.0	0.7	0.0	0.1
Prop In Lane	1.00		0.01	1.00		1.00	0.57		0.24	0.97		1.00
Lane Grp Cap(c), veh/h	420	1172	1231	246	2344	1049	255	0	0	283	0	141
V/C Ratio(X)	0.11	0.72	0.72	0.11	0.42	0.13	0.20	0.00	0.00	0.10	0.00	0.03
Avail Cap(c_a), veh/h	420	1172	1231	246	2345	1049	622	0	0	621	0	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	5.3	5.3	11.3	3.8	3.0	20.7	0.0	0.0	20.4	0.0	20.1
Incr Delay (d2), s/veh	0.1	2.2	2.1	0.2	0.1	0.1	0.4	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	7.8	8.2	0.3	3.0	0.6	0.7	0.0	0.0	0.4	0.0	0.1
LnGrp Delay(d),s/veh	5.9	7.5	7.4	11.5	3.9	3.1	21.0	0.0	0.0	20.5	0.0	20.2
LnGrp LOS	A	A	A	B	A	A	C			C		C
Approach Vol, veh/h		1785			1134			51				33
Approach Delay, s/veh		7.4			4.0			21.0				20.5
Approach LOS		A			A			C				C
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.3		38.0		10.3		38.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		16.0		32.0		16.0		32.0				
Max Q Clear Time (g_c+I1), s		2.7		20.5		3.4		17.0				
Green Ext Time (p_c), s		0.9		11.4		0.9		15.0				
Intersection Summary												
HCM 2010 Ctrl Delay				6.5								
HCM 2010 LOS				A								

HCM 2010 Signalized Intersection Summary
5: Old Folly Rd & Maybank Hwy

2016 Existing Conditions
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑	↑↑			
Traffic Volume (veh/h)	1163	253	0	648	241	2		
Future Volume (veh/h)	1163	253	0	648	241	2		
Number	8	18	7	4	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863	1863	1900		
Adj Flow Rate, veh/h	1199	261	0	668	250	0		
Adj No. of Lanes	2	0	0	2	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1851	399	0	2261	427	194		
Arrive On Green	0.64	0.64	0.00	0.64	0.12	0.00		
Sat Flow, veh/h	2990	625	0	3725	3548	1615		
Grp Volume(v), veh/h	728	732	0	668	250	0		
Grp Sat Flow(s),veh/h/ln	1770	1752	0	1770	1774	1615		
Q Serve(g_s), s	12.6	12.9	0.0	4.2	3.3	0.0		
Cycle Q Clear(g_c), s	12.6	12.9	0.0	4.2	3.3	0.0		
Prop In Lane		0.36	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1131	1120	0	2261	427	194		
V/C Ratio(X)	0.64	0.65	0.00	0.30	0.59	0.00		
Avail Cap(c_a), veh/h	1136	1125	0	2273	1139	518		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	5.5	5.6	0.0	4.0	20.7	0.0		
Incr Delay (d2), s/veh	1.2	1.4	0.0	0.1	1.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.3	6.5	0.0	2.0	1.7	0.0		
LnGrp Delay(d),s/veh	6.8	6.9	0.0	4.1	22.0	0.0		
LnGrp LOS	A	A		A	C			
Approach Vol, veh/h	1460			668	250			
Approach Delay, s/veh	6.9			4.1	22.0			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				37.8		12.0		37.8
Change Period (Y+Rc), s				6.0		6.0		6.0
Max Green Setting (Gmax), s				32.0		16.0		32.0
Max Q Clear Time (g_c+11), s				6.2		5.3		14.9
Green Ext Time (p_c), s				25.5		0.7		16.9
Intersection Summary								
HCM 2010 Ctrl Delay				7.7				
HCM 2010 LOS				A				
Notes								

HCM 2010 Signalized Intersection Summary
6: Maybank Hwy/Country Club Dr. & Folly Rd

2016 Existing Conditions
AM Peak Hour

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↘	↑↑	↗	↘	↖		↘	↑	↗
Traffic Volume (veh/h)	0	1221	65	24	689	923	1309	1	0	5	1	11
Future Volume (veh/h)	0	1221	65	24	689	923	1309	1	0	5	1	11
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	0	1285	68	25	725	972	1379	0	0	5	1	0
Adj No. of Lanes	0	2	0	1	2	1	2	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	2	2	2
Cap, veh/h	0	1366	72	104	1646	1349	1372	720	0	11	11	10
Arrive On Green	0.00	0.40	0.40	0.02	0.47	0.47	0.39	0.00	0.00	0.01	0.01	0.00
Sat Flow, veh/h	0	3513	181	1774	3539	1583	3548	1863	0	1774	1863	1583
Grp Volume(v), veh/h	0	664	689	25	725	972	1379	0	0	5	1	0
Grp Sat Flow(s),veh/h/ln	0	1770	1831	1774	1770	1583	1774	1863	0	1774	1863	1583
Q Serve(g_s), s	0.0	45.7	45.9	1.0	17.5	29.8	49.0	0.0	0.0	0.4	0.1	0.0
Cycle Q Clear(g_c), s	0.0	45.7	45.9	1.0	17.5	29.8	49.0	0.0	0.0	0.4	0.1	0.0
Prop In Lane	0.00		0.10	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	707	731	104	1646	1349	1372	720	0	11	11	10
V/C Ratio(X)	0.00	0.94	0.94	0.24	0.44	0.72	1.00	0.00	0.00	0.47	0.09	0.00
Avail Cap(c_a), veh/h	0	707	731	198	1732	1387	1372	720	0	224	235	200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	36.6	36.6	30.3	22.8	3.6	38.8	0.0	0.0	62.8	62.6	0.0
Incr Delay (d2), s/veh	0.0	20.5	20.5	1.2	0.2	1.8	25.5	0.0	0.0	28.8	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	26.3	27.3	0.5	8.6	34.4	28.7	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	57.1	57.1	31.4	23.0	5.4	64.3	0.0	0.0	91.5	66.0	0.0
LnGrp LOS		E	E	C	C	A	F			F	E	
Approach Vol, veh/h		1353			1722			1379			6	
Approach Delay, s/veh		57.1			13.2			64.3			87.3	
Approach LOS		E			B			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		64.9		6.8	8.3	56.6		55.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		62.0		16.0	9.0	47.0		49.0				
Max Q Clear Time (g_c+11), s		31.8		2.4	3.0	47.9		51.0				
Green Ext Time (p_c), s		27.1		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				42.4								
HCM 2010 LOS				D								
Notes												

HCM 2010 Signalized Intersection Summary
7: Folly Rd & Old Folly Rd

2016 Existing Conditions
AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations		↗	↖	↑↑	↑↑	↘		
Traffic Volume (veh/h)	0	280	267	1293	641	14		
Future Volume (veh/h)	0	280	267	1293	641	14		
Number	3	18	1	6	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	0	292	278	1347	668	0		
Adj No. of Lanes	0	1	1	2	2	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	2	2	2	2	2		
Cap, veh/h	0	0	743	2949	1967	880		
Arrive On Green	0.00	0.00	0.11	0.83	0.56	0.00		
Sat Flow, veh/h	0		1774	3632	3632	1583		
Grp Volume(v), veh/h	0.0		278	1347	668	0		
Grp Sat Flow(s),veh/h/ln			1774	1770	1770	1583		
Q Serve(g_s), s			1.9	3.7	3.7	0.0		
Cycle Q Clear(g_c), s			1.9	3.7	3.7	0.0		
Prop In Lane			1.00			1.00		
Lane Grp Cap(c), veh/h			743	2949	1967	880		
V/C Ratio(X)			0.37	0.46	0.34	0.00		
Avail Cap(c_a), veh/h			990	3146	1967	880		
HCM Platoon Ratio			1.00	1.00	1.00	1.00		
Upstream Filter(I)			1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh			2.4	0.8	4.4	0.0		
Incr Delay (d2), s/veh			0.3	0.1	0.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.8	1.7	1.8	0.0		
LnGrp Delay(d),s/veh			2.7	0.9	4.5	0.0		
LnGrp LOS			A	A	A			
Approach Vol, veh/h				1625	668			
Approach Delay, s/veh				1.2	4.5			
Approach LOS				A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	6.0	26.0				36.0		
Change Period (Y+Rc), s	6.0	6.0				6.0		
Max Green Setting (Gmax), s	6.0	17.0				32.0		
Max Q Clear Time (g_c+1), s	6.0	5.7				5.7		
Green Ext Time (p_c), s	0.4	11.1				24.3		
Intersection Summary								
HCM 2010 Ctrl Delay			2.2					
HCM 2010 LOS			A					

Intersection

Int Delay, s/veh 1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	914	37	69	1479	46	55
Future Vol, veh/h	914	37	69	1479	46	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1016	41	77	1643	51	61

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1057
Stage 1	-	-	1036
Stage 2	-	-	975
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	655
Stage 1	-	-	303
Stage 2	-	-	326
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	655
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	303
Stage 2	-	-	288

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	31
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	248	-	-	655	-
HCM Lane V/C Ratio	0.453	-	-	0.117	-
HCM Control Delay (s)	31	-	-	11.2	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.2	-	-	0.4	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	0	101	0	0	106
Future Vol, veh/h	0	0	101	0	0	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	112	0	0	118

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	230	112	0	0	112	0
Stage 1	112	-	-	-	-	-
Stage 2	118	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	758	941	-	-	1478	-
Stage 1	913	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	758	941	-	-	1478	-
Mov Cap-2 Maneuver	758	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	907	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	0		0		0
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1478
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1001	0	0	1603	0	0
Future Vol, veh/h	1001	0	0	1603	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1112	0	0	1781	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1112
Stage 1	-	-	1112
Stage 2	-	-	891
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	624
Stage 1	-	-	276
Stage 2	-	-	361
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	624
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	276
Stage 2	-	-	361

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	624	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

HCM 2010 Signalized Intersection Summary
 4: Harris Teeter Shopping Center/Wappoo Creek Dr. & Maybank Hwy

2016 Existing Conditions
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	938	32	25	1530	42	53	3	4	203	0	20
Future Volume (veh/h)	30	938	32	25	1530	42	53	3	4	203	0	20
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	33	1020	35	27	1663	46	58	3	4	221	0	22
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1966	67	331	1993	892	255	14	10	485	0	357
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.23	0.23	0.23	0.23	0.00	0.23
Sat Flow, veh/h	285	3491	120	533	3539	1583	600	64	43	1586	0	1583
Grp Volume(v), veh/h	33	517	538	27	1663	46	65	0	0	221	0	22
Grp Sat Flow(s),veh/h/ln	285	1770	1842	533	1770	1583	707	0	0	1586	0	1583
Q Serve(g_s), s	6.1	10.2	10.2	1.9	22.0	0.7	2.1	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	28.1	10.2	10.2	12.1	22.0	0.7	8.8	0.0	0.0	6.7	0.0	0.6
Prop In Lane	1.00		0.07	1.00		1.00	0.89		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	177	997	1037	331	1993	892	279	0	0	485	0	357
V/C Ratio(X)	0.19	0.52	0.52	0.08	0.83	0.05	0.23	0.00	0.00	0.46	0.00	0.06
Avail Cap(c_a), veh/h	177	997	1037	331	1993	892	358	0	0	563	0	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	7.7	7.7	11.4	10.2	5.6	22.7	0.0	0.0	19.6	0.0	17.3
Incr Delay (d2), s/veh	0.5	0.5	0.5	0.1	3.2	0.0	0.4	0.0	0.0	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.0	5.2	0.3	11.5	0.3	1.0	0.0	0.0	3.2	0.0	0.3
LnGrp Delay(d),s/veh	22.3	8.1	8.1	11.5	13.5	5.6	23.1	0.0	0.0	20.3	0.0	17.3
LnGrp LOS	C	A	A	B	B	A	C			C		B
Approach Vol, veh/h		1088			1736			65				243
Approach Delay, s/veh		8.6			13.2			23.1				20.0
Approach LOS		A			B			C				C
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.8		38.0		18.8		38.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		16.0		32.0		16.0		32.0				
Max Q Clear Time (g_c+I1), s		8.7		24.0		10.8		30.1				
Green Ext Time (p_c), s		2.7		8.0		2.0		1.9				
Intersection Summary												
HCM 2010 Ctrl Delay				12.3								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
5: Old Folly Rd & Maybank Hwy

2016 Existing Conditions
PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑	↑↑			
Traffic Volume (veh/h)	868	286	0	1319	416	8		
Future Volume (veh/h)	868	286	0	1319	416	8		
Number	8	18	7	4	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863	1863	1900		
Adj Flow Rate, veh/h	886	292	0	1346	431	0		
Adj No. of Lanes	2	0	0	2	2	1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1487	489	0	2009	639	291		
Arrive On Green	0.57	0.57	0.00	0.57	0.18	0.00		
Sat Flow, veh/h	2712	861	0	3725	3548	1615		
Grp Volume(v), veh/h	598	580	0	1346	431	0		
Grp Sat Flow(s),veh/h/ln	1770	1711	0	1770	1774	1615		
Q Serve(g_s), s	10.5	10.5	0.0	12.6	5.4	0.0		
Cycle Q Clear(g_c), s	10.5	10.5	0.0	12.6	5.4	0.0		
Prop In Lane		0.50	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1004	971	0	2009	639	291		
V/C Ratio(X)	0.60	0.60	0.00	0.67	0.67	0.00		
Avail Cap(c_a), veh/h	1005	972	0	2011	1194	544		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.7	6.7	0.0	7.2	18.2	0.0		
Incr Delay (d2), s/veh	1.0	1.0	0.0	0.9	1.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.2	5.1	0.0	6.2	2.7	0.0		
LnGrp Delay(d),s/veh	7.7	7.7	0.0	8.0	19.4	0.0		
LnGrp LOS	A	A		A	B			
Approach Vol, veh/h	1178			1346	431			
Approach Delay, s/veh	7.7			8.0	19.4			
Approach LOS	A			A	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				33.0		14.6		33.0
Change Period (Y+Rc), s				6.0		6.0		6.0
Max Green Setting (Gmax), s				27.0		16.0		27.0
Max Q Clear Time (g_c+1), s				14.6		7.4		12.5
Green Ext Time (p_c), s				12.4		1.2		14.4
Intersection Summary								
HCM 2010 Ctrl Delay			9.6					
HCM 2010 LOS			A					
Notes								

HCM 2010 Signalized Intersection Summary
 6: Maybank Hwy/Country Club Dr. & Folly Rd

2016 Existing Conditions
 PM Peak Hour

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↘	↑↑	↗	↘	↗		↘	↑	↗
Traffic Volume (veh/h)	0	827	3	33	1983	1455	1037	15	0	20	8	13
Future Volume (veh/h)	0	827	3	33	1983	1455	1037	15	0	20	8	13
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	0	861	3	34	2066	1516	1091	0	0	21	8	0
Adj No. of Lanes	0	2	0	1	2	1	2	1	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	2	2	2
Cap, veh/h	0	1736	6	295	1936	1335	1051	552	0	35	37	31
Arrive On Green	0.00	0.48	0.48	0.02	0.55	0.55	0.30	0.00	0.00	0.02	0.02	0.00
Sat Flow, veh/h	0	3711	13	1774	3539	1583	3548	1863	0	1774	1863	1583
Grp Volume(v), veh/h	0	421	443	34	2066	1516	1091	0	0	21	8	0
Grp Sat Flow(s),veh/h/ln	0	1770	1861	1774	1770	1583	1774	1863	0	1774	1863	1583
Q Serve(g_s), s	0.0	21.4	21.4	1.2	72.0	72.0	39.0	0.0	0.0	1.5	0.6	0.0
Cycle Q Clear(g_c), s	0.0	21.4	21.4	1.2	72.0	72.0	39.0	0.0	0.0	1.5	0.6	0.0
Prop In Lane	0.00		0.01	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	849	893	295	1936	1335	1051	552	0	35	37	31
V/C Ratio(X)	0.00	0.50	0.50	0.12	1.07	1.14	1.04	0.00	0.00	0.60	0.22	0.00
Avail Cap(c_a), veh/h	0	849	893	378	1936	1335	1051	552	0	216	226	192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	23.4	23.4	17.9	29.8	7.3	46.3	0.0	0.0	64.0	63.5	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.2	41.1	70.6	38.0	0.0	0.0	15.0	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.5	11.1	0.6	46.0	74.4	24.5	0.0	0.0	0.9	0.3	0.0
LnGrp Delay(d),s/veh	0.0	23.8	23.8	18.0	70.9	77.9	84.3	0.0	0.0	79.0	66.4	0.0
LnGrp LOS		C	C	B	F	F	F			E	E	
Approach Vol, veh/h		864			3616			1091			29	
Approach Delay, s/veh		23.8			73.3			84.3			75.5	
Approach LOS		C			E			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		78.0		8.6	8.8	69.2		45.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		72.0		16.0	9.0	57.0		39.0				
Max Q Clear Time (g_c+11), s		74.0		3.5	3.2	23.4		41.0				
Green Ext Time (p_c), s		0.0		0.1	0.0	33.5		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				67.8								
HCM 2010 LOS				E								
Notes												

HCM 2010 Signalized Intersection Summary
7: Folly Rd & Old Folly Rd

2016 Existing Conditions
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations		↗	↖	↑↑	↑↑	↘		
Traffic Volume (veh/h)	0	376	518	819	1394	21		
Future Volume (veh/h)	0	376	518	819	1394	21		
Number	3	18	1	6	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	0	388	534	844	1437	0		
Adj No. of Lanes	0	1	1	2	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	0	2	2	2	2	2		
Cap, veh/h	0	0	602	3198	2131	953		
Arrive On Green	0.00	0.00	0.21	0.90	0.60	0.00		
Sat Flow, veh/h	0		1774	3632	3632	1583		
Grp Volume(v), veh/h	0.0		534	844	1437	0		
Grp Sat Flow(s),veh/h/ln			1774	1770	1770	1583		
Q Serve(g_s), s			9.4	1.9	16.9	0.0		
Cycle Q Clear(g_c), s			9.4	1.9	16.9	0.0		
Prop In Lane			1.00			1.00		
Lane Grp Cap(c), veh/h			602	3198	2131	953		
V/C Ratio(X)			0.89	0.26	0.67	0.00		
Avail Cap(c_a), veh/h			836	3524	2131	953		
HCM Platoon Ratio			1.00	1.00	1.00	1.00		
Upstream Filter(I)			1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh			14.5	0.4	8.3	0.0		
Incr Delay (d2), s/veh			8.7	0.0	0.9	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln			10.1	0.8	8.4	0.0		
LnGrp Delay(d),s/veh			23.2	0.4	9.2	0.0		
LnGrp LOS			C	A	A			
Approach Vol, veh/h				1378	1437			
Approach Delay, s/veh				9.2	9.2			
Approach LOS				A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	18.8	43.5				62.3		
Change Period (Y+Rc), s	6.0	6.0				6.0		
Max Green Setting (Gmax), s	21.0	35.0				62.0		
Max Q Clear Time (g_c+I1), s	18.9	18.9				3.9		
Green Ext Time (p_c), s	1.4	15.9				52.4		
Intersection Summary								
HCM 2010 Ctrl Delay			9.2					
HCM 2010 LOS			A					

Appendix E

Analysis Worksheets (2019 No Build Conditions)

Intersection

Int Delay, s/veh 6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1746	32	34	719	35	105
Future Vol, veh/h	1746	32	34	719	35	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1940	36	38	799	39	117

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1976
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	289
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	289
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	118.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	161	-	-	289	-
HCM Lane V/C Ratio	0.966	-	-	0.131	-
HCM Control Delay (s)	118.6	-	-	19.3	-
HCM Lane LOS	F	-	-	C	-
HCM 95th %tile Q(veh)	7.3	-	-	0.4	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	37	103	0	5	61
Future Vol, veh/h	0	37	103	0	5	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	41	114	0	6	68

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	193	114	0
Stage 1	114	-	-
Stage 2	79	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	796	939	1475
Stage 1	911	-	-
Stage 2	944	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	793	939	1475
Mov Cap-2 Maneuver	793	-	-
Stage 1	911	-	-
Stage 2	940	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 939	1475	-
HCM Lane V/C Ratio	-	- 0.044	0.004	-
HCM Control Delay (s)	-	- 9	7.5	0
HCM Lane LOS	-	- A	A	A
HCM 95th %tile Q(veh)	-	- 0.1	0	-

Intersection

Int Delay, s/veh 2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1712	25	40	954	35	79
Future Vol, veh/h	1712	25	40	954	35	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1902	28	44	1060	39	88

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1930
Stage 1	-	-	1916
Stage 2	-	-	619
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	301
Stage 1	-	-	101
Stage 2	-	-	499
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	301
Mov Cap-2 Maneuver	-	-	80
Stage 1	-	-	101
Stage 2	-	-	426

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	44.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	80	255	-	-	301	-
HCM Lane V/C Ratio	0.486	0.344	-	-	0.148	-
HCM Control Delay (s)	86.7	26.4	-	-	19	-
HCM Lane LOS	F	D	-	-	C	-
HCM 95th %tile Q(veh)	2	1.5	-	-	0.5	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	1735	11	27	962	126	28	9	11	27	1	4
Future Volume (veh/h)	45	1735	11	27	962	126	28	9	11	27	1	4
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	49	1886	12	29	1046	137	30	10	12	29	1	4
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	399	2489	16	217	2443	1093	167	39	30	257	7	136
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	472	3605	23	237	3539	1583	715	459	352	1461	78	1583
Grp Volume(v), veh/h	49	925	973	29	1046	137	52	0	0	30	0	4
Grp Sat Flow(s),veh/h/ln	472	1770	1859	237	1770	1583	1526	0	0	1539	0	1583
Q Serve(g_s), s	2.7	18.2	18.2	4.9	7.0	1.6	0.9	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	9.7	18.2	18.2	23.1	7.0	1.6	1.7	0.0	0.0	0.8	0.0	0.1
Prop In Lane	1.00		0.01	1.00		1.00	0.58		0.23	0.97		1.00
Lane Grp Cap(c), veh/h	399	1222	1283	217	2443	1093	237	0	0	264	0	136
V/C Ratio(X)	0.12	0.76	0.76	0.13	0.43	0.13	0.22	0.00	0.00	0.11	0.00	0.03
Avail Cap(c_a), veh/h	399	1222	1283	217	2444	1093	560	0	0	561	0	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	5.4	5.4	12.9	3.6	2.8	23.1	0.0	0.0	22.8	0.0	22.5
Incr Delay (d2), s/veh	0.1	2.8	2.7	0.3	0.1	0.1	0.5	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	9.4	9.9	0.3	3.4	0.7	0.8	0.0	0.0	0.4	0.0	0.1
LnGrp Delay(d),s/veh	5.9	8.1	8.1	13.2	3.8	2.9	23.6	0.0	0.0	23.0	0.0	22.5
LnGrp LOS	A	A	A	B	A	A	C			C		C
Approach Vol, veh/h		1947			1212			52				34
Approach Delay, s/veh		8.0			3.9			23.6				22.9
Approach LOS		A			A			C				C
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.6		43.0		10.6		43.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		16.0		37.0		16.0		37.0				
Max Q Clear Time (g_c+I1), s		2.8		25.1		3.7		20.2				
Green Ext Time (p_c), s		0.9		11.9		0.9		16.8				
Intersection Summary												
HCM 2010 Ctrl Delay				6.9								
HCM 2010 LOS				A								

HCM 2010 Signalized Intersection Summary
5: Old Folly Rd & Maybank Hwy

2019 No Build Conditions
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑	↑↑			
Traffic Volume (veh/h)	1264	293	0	695	262	2		
Future Volume (veh/h)	1264	293	0	695	262	2		
Number	8	18	7	4	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863	1863	1900		
Adj Flow Rate, veh/h	1331	308	0	732	278	0		
Adj No. of Lanes	2	0	0	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1816	413	0	2242	456	208		
Arrive On Green	0.63	0.63	0.00	0.63	0.13	0.00		
Sat Flow, veh/h	2959	651	0	3725	3548	1615		
Grp Volume(v), veh/h	813	826	0	732	278	0		
Grp Sat Flow(s),veh/h/ln	1770	1748	0	1770	1774	1615		
Q Serve(g_s), s	15.7	16.6	0.0	4.8	3.7	0.0		
Cycle Q Clear(g_c), s	15.7	16.6	0.0	4.8	3.7	0.0		
Prop In Lane		0.37	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1121	1107	0	2242	456	208		
V/C Ratio(X)	0.72	0.75	0.00	0.33	0.61	0.00		
Avail Cap(c_a), veh/h	1123	1109	0	2245	1125	512		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.3	6.4	0.0	4.3	20.8	0.0		
Incr Delay (d2), s/veh	2.4	2.8	0.0	0.1	1.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	8.2	8.7	0.0	2.4	1.9	0.0		
LnGrp Delay(d),s/veh	8.6	9.2	0.0	4.4	22.1	0.0		
LnGrp LOS	A	A		A	C			
Approach Vol, veh/h	1639			732	278			
Approach Delay, s/veh	8.9			4.4	22.1			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				38.0		12.5		38.0
Change Period (Y+Rc), s				6.0		6.0		6.0
Max Green Setting (Gmax), s				32.0		16.0		32.0
Max Q Clear Time (g_c+11), s				6.8		5.7		18.6
Green Ext Time (p_c), s				25.0		0.8		13.4
Intersection Summary								
HCM 2010 Ctrl Delay			9.0					
HCM 2010 LOS			A					
Notes								

HCM 2010 Signalized Intersection Summary
6: Maybank Hwy/Country Club Dr. & Folly Rd

2019 No Build Conditions
AM Peak Hour



Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↘	↑↑	↗	↘	↖		↘	↑	↗
Traffic Volume (veh/h)	0	1258	67	25	710	978	1415	1	0	5	1	11
Future Volume (veh/h)	0	1258	67	25	710	978	1415	1	0	5	1	11
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	0	1324	71	26	747	1029	1490	0	0	5	1	0
Adj No. of Lanes	0	2	0	1	2	1	2	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	2	2	2
Cap, veh/h	0	1338	72	93	1621	1349	1399	734	0	11	11	10
Arrive On Green	0.00	0.39	0.39	0.02	0.46	0.46	0.39	0.00	0.00	0.01	0.01	0.00
Sat Flow, veh/h	0	3510	183	1774	3539	1583	3548	1863	0	1774	1863	1583
Grp Volume(v), veh/h	0	685	710	26	747	1029	1490	0	0	5	1	0
Grp Sat Flow(s),veh/h/ln	0	1770	1830	1774	1770	1583	1774	1863	0	1774	1863	1583
Q Serve(g_s), s	0.0	48.7	48.9	1.1	18.4	34.8	50.0	0.0	0.0	0.4	0.1	0.0
Cycle Q Clear(g_c), s	0.0	48.7	48.9	1.1	18.4	34.8	50.0	0.0	0.0	0.4	0.1	0.0
Prop In Lane	0.00		0.10	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	693	717	93	1621	1349	1399	734	0	11	11	10
V/C Ratio(X)	0.00	0.99	0.99	0.28	0.46	0.76	1.07	0.00	0.00	0.47	0.09	0.00
Avail Cap(c_a), veh/h	0	693	717	185	1702	1386	1399	734	0	224	235	200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	38.3	38.4	31.7	23.6	4.0	38.4	0.0	0.0	62.8	62.7	0.0
Incr Delay (d2), s/veh	0.0	31.0	31.2	1.6	0.2	2.5	43.6	0.0	0.0	28.8	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	29.7	30.9	0.6	9.0	36.7	32.7	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	69.3	69.6	33.3	23.8	6.5	82.0	0.0	0.0	91.6	66.1	0.0
LnGrp LOS		E	E	C	C	A	F			F	E	
Approach Vol, veh/h		1395			1802			1490			6	
Approach Delay, s/veh		69.4			14.0			82.0			87.3	
Approach LOS		E			B			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		64.1		6.8	8.4	55.7		56.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		61.0		16.0	9.0	46.0		50.0				
Max Q Clear Time (g_c+11), s		36.8		2.4	3.1	50.9		52.0				
Green Ext Time (p_c), s		21.3		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				52.2								
HCM 2010 LOS				D								
Notes												

HCM 2010 Signalized Intersection Summary
7: Folly Rd & Old Folly Rd

2019 No Build Conditions
AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations		↗	↖	↑↑	↑↑	↗		
Traffic Volume (veh/h)	0	321	288	1332	661	15		
Future Volume (veh/h)	0	321	288	1332	661	15		
Number	3	18	1	6	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	0	338	303	1402	696	0		
Adj No. of Lanes	0	1	1	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	0	2	2	2	2	2		
Cap, veh/h	0	0	737	2952	1946	871		
Arrive On Green	0.00	0.00	0.12	0.83	0.55	0.00		
Sat Flow, veh/h	0		1774	3632	3632	1583		
Grp Volume(v), veh/h	0.0		303	1402	696	0		
Grp Sat Flow(s),veh/h/ln			1774	1770	1770	1583		
Q Serve(g_s), s			2.1	3.9	4.0	0.0		
Cycle Q Clear(g_c), s			2.1	3.9	4.0	0.0		
Prop In Lane			1.00			1.00		
Lane Grp Cap(c), veh/h			737	2952	1946	871		
V/C Ratio(X)			0.41	0.47	0.36	0.00		
Avail Cap(c_a), veh/h			968	3130	1946	871		
HCM Platoon Ratio			1.00	1.00	1.00	1.00		
Upstream Filter(I)			1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh			2.5	0.8	4.6	0.0		
Incr Delay (d2), s/veh			0.4	0.1	0.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.9	1.8	2.0	0.0		
LnGrp Delay(d),s/veh			2.9	0.9	4.7	0.0		
LnGrp LOS			A	A	A			
Approach Vol, veh/h				1705	696			
Approach Delay, s/veh				1.3	4.7			
Approach LOS				A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	30.3	25.9				36.2		
Change Period (Y+Rc), s	6.0	6.0				6.0		
Max Green Setting (Gmax), s	17.0					32.0		
Max Q Clear Time (g_c+I), s	6.0					5.9		
Green Ext Time (p_c), s	0.4	10.9				24.3		
Intersection Summary								
HCM 2010 Ctrl Delay			2.3					
HCM 2010 LOS			A					

Intersection

Int Delay, s/veh 2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	989	56	71	1558	57	67
Future Vol, veh/h	989	56	71	1558	57	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1099	62	79	1731	63	74

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1161
Stage 1	-	-	1130
Stage 2	-	-	1023
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	597
Stage 1	-	-	270
Stage 2	-	-	308
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	597
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	270
Stage 2	-	-	267

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	44.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	223	-	-	597	-
HCM Lane V/C Ratio	0.618	-	-	0.132	-
HCM Control Delay (s)	44.2	-	-	11.9	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	3.6	-	-	0.5	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	20	104	0	17	109
Future Vol, veh/h	0	20	104	0	17	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	116	0	19	121

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	275	116	0	0	116	0
Stage 1	116	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	715	936	-	-	1473	-
Stage 1	909	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	705	936	-	-	1473	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	8.9		0		1
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	936	1473
HCM Lane V/C Ratio	-	-	0.024	0.013
HCM Control Delay (s)	-	-	8.9	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection

Int Delay, s/veh 1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1042	47	109	1651	35	59
Future Vol, veh/h	1042	47	109	1651	35	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1158	52	121	1834	39	66

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	2343
Stage 1	-	-	1184
Stage 2	-	-	1159
Critical Hdwy	-	4.14	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	2.22	3.52
Pot Cap-1 Maneuver	-	572	~ 30
Stage 1	-	-	253
Stage 2	-	-	261
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	572	~ 24
Mov Cap-2 Maneuver	-	-	114
Stage 1	-	-	253
Stage 2	-	-	206

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	28.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	114	441	-	-	572	-
HCM Lane V/C Ratio	0.341	0.149	-	-	0.212	-
HCM Control Delay (s)	52.1	14.6	-	-	13	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th %tile Q(veh)	1.4	0.5	-	-	0.8	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1037	33	26	1686	44	54	3	4	209	0	21
Future Volume (veh/h)	31	1037	33	26	1686	44	54	3	4	209	0	21
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	34	1127	36	28	1833	48	59	3	4	227	0	23
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	1964	63	296	1986	888	255	14	10	490	0	362
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.23	0.23	0.23	0.23	0.00	0.23
Sat Flow, veh/h	241	3501	112	481	3539	1583	592	62	42	1590	0	1583
Grp Volume(v), veh/h	34	570	593	28	1833	48	66	0	0	227	0	23
Grp Sat Flow(s),veh/h/ln	241	1770	1843	481	1770	1583	695	0	0	1590	0	1583
Q Serve(g_s), s	5.1	11.9	11.9	2.3	26.9	0.8	2.2	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	32.0	11.9	11.9	14.2	26.9	0.8	9.1	0.0	0.0	6.9	0.0	0.6
Prop In Lane	1.00		0.06	1.00		1.00	0.89		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	148	993	1034	296	1986	888	279	0	0	490	0	362
V/C Ratio(X)	0.23	0.57	0.57	0.09	0.92	0.05	0.24	0.00	0.00	0.46	0.00	0.06
Avail Cap(c_a), veh/h	148	993	1034	296	1986	888	352	0	0	562	0	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	8.1	8.1	12.7	11.4	5.7	22.8	0.0	0.0	19.6	0.0	17.2
Incr Delay (d2), s/veh	0.8	0.8	0.8	0.1	7.8	0.0	0.4	0.0	0.0	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.9	6.2	0.3	14.9	0.3	1.0	0.0	0.0	3.2	0.0	0.3
LnGrp Delay(d),s/veh	27.7	8.9	8.9	12.8	19.2	5.7	23.2	0.0	0.0	20.3	0.0	17.3
LnGrp LOS	C	A	A	B	B	A	C			C		B
Approach Vol, veh/h		1197			1909			66			250	
Approach Delay, s/veh		9.4			18.8			23.2			20.0	
Approach LOS		A			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.0		38.0		19.0		38.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		16.0		32.0		16.0		32.0				
Max Q Clear Time (g_c+I1), s		8.9		28.9		11.1		34.0				
Green Ext Time (p_c), s		2.7		3.1		1.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				15.7								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
5: Old Folly Rd & Maybank Hwy

2019 No Build Conditions
PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑	↑↑			
Traffic Volume (veh/h)	941	317	0	1432	465	8		
Future Volume (veh/h)	941	317	0	1432	465	8		
Number	8	18	7	4	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863	1863	1900		
Adj Flow Rate, veh/h	991	334	0	1507	496	0		
Adj No. of Lanes	2	0	0	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1534	513	0	2084	676	308		
Arrive On Green	0.59	0.59	0.00	0.59	0.19	0.00		
Sat Flow, veh/h	2700	872	0	3725	3548	1615		
Grp Volume(v), veh/h	670	655	0	1507	496	0		
Grp Sat Flow(s),veh/h/ln	1770	1709	0	1770	1774	1615		
Q Serve(g_s), s	13.6	13.9	0.0	16.6	7.1	0.0		
Cycle Q Clear(g_c), s	13.6	13.9	0.0	16.6	7.1	0.0		
Prop In Lane		0.51	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1042	1006	0	2084	676	308		
V/C Ratio(X)	0.64	0.65	0.00	0.72	0.73	0.00		
Avail Cap(c_a), veh/h	1042	1006	0	2084	1045	476		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	7.4	7.4	0.0	8.0	20.7	0.0		
Incr Delay (d2), s/veh	1.4	1.5	0.0	1.3	1.6	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.9	6.8	0.0	8.3	3.6	0.0		
LnGrp Delay(d),s/veh	8.8	8.9	0.0	9.3	22.3	0.0		
LnGrp LOS	A	A		A	C			
Approach Vol, veh/h	1325			1507	496			
Approach Delay, s/veh	8.9			9.3	22.3			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				38.0		16.3		38.0
Change Period (Y+Rc), s				6.0		6.0		6.0
Max Green Setting (Gmax), s				32.0		16.0		32.0
Max Q Clear Time (g_c+1), s				18.6		9.1		15.9
Green Ext Time (p_c), s				13.4		1.2		16.1
Intersection Summary								
HCM 2010 Ctrl Delay				11.0				
HCM 2010 LOS				B				
Notes								

HCM 2010 Signalized Intersection Summary
6: Maybank Hwy/Country Club Dr. & Folly Rd

2019 No Build Conditions
PM Peak Hour



Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Volume (veh/h)	0	852	3	34	2043	1573	1116	16	0	21	8	14
Future Volume (veh/h)	0	852	3	34	2043	1573	1116	16	0	21	8	14
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	0	897	3	36	2151	1656	1187	0	0	22	8	0
Adj No. of Lanes	0	2	0	1	2	1	2	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	2	2	2
Cap, veh/h	0	1706	6	277	1909	1335	1078	566	0	36	38	32
Arrive On Green	0.00	0.47	0.47	0.02	0.54	0.54	0.30	0.00	0.00	0.02	0.02	0.00
Sat Flow, veh/h	0	3711	12	1774	3539	1583	3548	1863	0	1774	1863	1583
Grp Volume(v), veh/h	0	439	461	36	2151	1656	1187	0	0	22	8	0
Grp Sat Flow(s),veh/h/ln	0	1770	1861	1774	1770	1583	1774	1863	0	1774	1863	1583
Q Serve(g_s), s	0.0	22.9	22.9	1.3	71.0	71.0	40.0	0.0	0.0	1.6	0.6	0.0
Cycle Q Clear(g_c), s	0.0	22.9	22.9	1.3	71.0	71.0	40.0	0.0	0.0	1.6	0.6	0.0
Prop In Lane	0.00		0.01	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	834	877	277	1909	1335	1078	566	0	36	38	32
V/C Ratio(X)	0.00	0.53	0.53	0.13	1.13	1.24	1.10	0.00	0.00	0.61	0.21	0.00
Avail Cap(c_a), veh/h	0	834	877	359	1909	1335	1078	566	0	216	226	192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	24.5	24.5	18.7	30.3	7.2	45.8	0.0	0.0	64.0	63.5	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.6	0.2	64.6	114.8	59.5	0.0	0.0	15.7	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.4	11.9	0.7	51.6	90.8	28.4	0.0	0.0	1.0	0.3	0.0
LnGrp Delay(d),s/veh	0.0	25.1	25.0	18.9	94.9	122.0	105.3	0.0	0.0	79.7	66.2	0.0
LnGrp LOS		C	C	B	F	F	F			E	E	
Approach Vol, veh/h		900			3843			1187			30	
Approach Delay, s/veh		25.1			105.9			105.3			76.1	
Approach LOS		C			F			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		77.0		8.7	8.9	68.1		46.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		71.0		16.0	9.0	56.0		40.0				
Max Q Clear Time (g_c+11), s		73.0		3.6	3.3	24.9		42.0				
Green Ext Time (p_c), s		0.0		0.1	0.0	31.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				93.4								
HCM 2010 LOS				F								
Notes												

HCM 2010 Signalized Intersection Summary
7: Folly Rd & Old Folly Rd

2019 No Build Conditions
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations		↗	↖	↑↑	↑↑	↘		
Traffic Volume (veh/h)	0	410	570	844	1436	22		
Future Volume (veh/h)	0	410	570	844	1436	22		
Number	3	18	1	6	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	0	432	600	888	1512	0		
Adj No. of Lanes	0	1	1	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	0	2	2	2	2	2		
Cap, veh/h	0	0	650	3305	2149	961		
Arrive On Green	0.00	0.00	0.26	0.93	0.61	0.00		
Sat Flow, veh/h	0		1774	3632	3632	1583		
Grp Volume(v), veh/h	0.0		600	888	1512	0		
Grp Sat Flow(s),veh/h/ln			1774	1770	1770	1583		
Q Serve(g_s), s			19.8	2.0	26.5	0.0		
Cycle Q Clear(g_c), s			19.8	2.0	26.5	0.0		
Prop In Lane			1.00			1.00		
Lane Grp Cap(c), veh/h			650	3305	2149	961		
V/C Ratio(X)			0.92	0.27	0.70	0.00		
Avail Cap(c_a), veh/h			853	3594	2149	961		
HCM Platoon Ratio			1.00	1.00	1.00	1.00		
Upstream Filter(I)			1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh			23.3	0.3	12.2	0.0		
Incr Delay (d2), s/veh			13.0	0.0	1.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln			16.7	0.9	13.1	0.0		
LnGrp Delay(d),s/veh			36.3	0.3	13.3	0.0		
LnGrp LOS			D	A	B			
Approach Vol, veh/h				1488	1512			
Approach Delay, s/veh				14.8	13.3			
Approach LOS				B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	29.6	61.0				90.6		
Change Period (Y+Rc), s	6.0	6.0				6.0		
Max Green Setting (Gmax), s	34.6	52.0				92.0		
Max Q Clear Time (g_c+D), s	21.8	28.5				4.0		
Green Ext Time (p_c), s	1.8	23.3				80.6		
Intersection Summary								
HCM 2010 Ctrl Delay			14.0					
HCM 2010 LOS			B					

Appendix F

Analysis Worksheets (2019 Build Conditions)

Intersection

Int Delay, s/veh 13

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1756	32	34	729	54	105
Future Vol, veh/h	1756	32	34	729	54	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1951	36	38	810	60	117

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1987
Stage 1	-	-	1969
Stage 2	-	-	481
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	286
Stage 1	-	-	95
Stage 2	-	-	588
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	286
Mov Cap-2 Maneuver	-	-	78
Stage 1	-	-	95
Stage 2	-	-	510

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	216.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	142	-	-	286	-
HCM Lane V/C Ratio	1.244	-	-	0.132	-
HCM Control Delay (s)	216.5	-	-	19.5	-
HCM Lane LOS	F	-	-	C	-
HCM 95th %tile Q(veh)	10.6	-	-	0.5	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	56	103	0	5	61
Future Vol, veh/h	0	56	103	0	5	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	62	114	0	6	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	193	114	0	0	114	0
Stage 1	114	-	-	-	-	-
Stage 2	79	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	796	939	-	-	1475	-
Stage 1	911	-	-	-	-	-
Stage 2	944	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	793	939	-	-	1475	-
Mov Cap-2 Maneuver	793	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	940	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	9.1		0		0.6
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 939	1475	-
HCM Lane V/C Ratio	-	- 0.066	0.004	-
HCM Control Delay (s)	-	- 9.1	7.5	0
HCM Lane LOS	-	- A	A	A
HCM 95th %tile Q(veh)	-	- 0.2	0	-

Intersection

Int Delay, s/veh 5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1709	38	73	952	47	170
Future Vol, veh/h	1709	38	73	952	47	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1899	42	81	1058	52	189

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1941
Stage 1	-	-	1920
Stage 2	-	-	691
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	298
Stage 1	-	-	101
Stage 2	-	-	459
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	298
Mov Cap-2 Maneuver	-	-	76
Stage 1	-	-	101
Stage 2	-	-	334

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	67.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	76	252	-	-	298	-
HCM Lane V/C Ratio	0.687	0.75	-	-	0.272	-
HCM Control Delay (s)	122	52.3	-	-	21.5	-
HCM Lane LOS	F	F	-	-	C	-
HCM 95th %tile Q(veh)	3.2	5.3	-	-	1.1	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 Signalized Intersection Summary
 4: Harris Teeter Shopping Center/Wappoo Creek Dr. & Maybank Hwy

2019 Build Conditions
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	1823	11	27	993	126	28	9	11	27	1	4
Future Volume (veh/h)	45	1823	11	27	993	126	28	9	11	27	1	4
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	49	1982	12	29	1079	137	30	10	12	29	1	4
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	2576	16	201	2528	1131	154	37	28	241	6	129
Arrive On Green	0.71	0.71	0.71	0.71	0.71	0.71	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	457	3607	22	216	3539	1583	706	457	349	1473	78	1583
Grp Volume(v), veh/h	49	971	1023	29	1079	137	52	0	0	30	0	4
Grp Sat Flow(s),veh/h/ln	457	1770	1859	216	1770	1583	1512	0	0	1550	0	1583
Q Serve(g_s), s	2.9	20.4	20.5	5.8	7.4	1.6	1.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	10.3	20.4	20.5	26.3	7.4	1.6	1.9	0.0	0.0	0.9	0.0	0.1
Prop In Lane	1.00		0.01	1.00		1.00	0.58		0.23	0.97		1.00
Lane Grp Cap(c), veh/h	392	1264	1328	201	2528	1131	220	0	0	247	0	129
V/C Ratio(X)	0.13	0.77	0.77	0.14	0.43	0.12	0.24	0.00	0.00	0.12	0.00	0.03
Avail Cap(c_a), veh/h	392	1264	1328	201	2529	1131	509	0	0	513	0	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.6	5.3	5.3	13.7	3.5	2.6	25.6	0.0	0.0	25.2	0.0	24.9
Incr Delay (d2), s/veh	0.1	2.9	2.8	0.3	0.1	0.0	0.5	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	10.7	11.3	0.4	3.5	0.7	0.8	0.0	0.0	0.5	0.0	0.1
LnGrp Delay(d),s/veh	5.7	8.3	8.2	14.0	3.6	2.7	26.2	0.0	0.0	25.4	0.0	25.0
LnGrp LOS	A	A	A	B	A	A	C			C		C
Approach Vol, veh/h		2043			1245			52			34	
Approach Delay, s/veh		8.1			3.7			26.2			25.4	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.8		48.0		10.8		48.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		16.0		42.0		16.0		42.0				
Max Q Clear Time (g_c+I1), s		2.9		28.3		3.9		22.5				
Green Ext Time (p_c), s		0.9		13.6		0.9		19.4				
Intersection Summary												
HCM 2010 Ctrl Delay				7.0								
HCM 2010 LOS				A								

HCM 2010 Signalized Intersection Summary
5: Old Folly Rd & Maybank Hwy

2019 Build Conditions
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑	↑↑			
Traffic Volume (veh/h)	1323	322	0	716	272	2		
Future Volume (veh/h)	1323	322	0	716	272	2		
Number	8	18	7	4	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863	1863	1900		
Adj Flow Rate, veh/h	1393	339	0	754	288	0		
Adj No. of Lanes	2	0	0	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1793	426	0	2235	467	212		
Arrive On Green	0.63	0.63	0.00	0.63	0.13	0.00		
Sat Flow, veh/h	2932	674	0	3725	3548	1615		
Grp Volume(v), veh/h	855	877	0	754	288	0		
Grp Sat Flow(s),veh/h/ln	1770	1744	0	1770	1774	1615		
Q Serve(g_s), s	17.5	18.9	0.0	5.1	3.9	0.0		
Cycle Q Clear(g_c), s	17.5	18.9	0.0	5.1	3.9	0.0		
Prop In Lane		0.39	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1117	1101	0	2235	467	212		
V/C Ratio(X)	0.77	0.80	0.00	0.34	0.62	0.00		
Avail Cap(c_a), veh/h	1118	1102	0	2236	1121	510		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.7	6.9	0.0	4.4	20.8	0.0		
Incr Delay (d2), s/veh	3.2	4.2	0.0	0.1	1.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.3	10.0	0.0	2.4	2.0	0.0		
LnGrp Delay(d),s/veh	9.9	11.1	0.0	4.5	22.1	0.0		
LnGrp LOS	A	B		A	C			
Approach Vol, veh/h	1732			754	288			
Approach Delay, s/veh	10.5			4.5	22.1			
Approach LOS	B			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				38.0		12.7		38.0
Change Period (Y+Rc), s				6.0		6.0		6.0
Max Green Setting (Gmax), s				32.0		16.0		32.0
Max Q Clear Time (g_c+1), s				7.1		5.9		20.9
Green Ext Time (p_c), s				24.9		0.8		11.1
Intersection Summary								
HCM 2010 Ctrl Delay			10.1					
HCM 2010 LOS			B					
Notes								

HCM 2010 Signalized Intersection Summary
6: Maybank Hwy/Country Club Dr. & Folly Rd

2019 Build Conditions
AM Peak Hour



Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↘	↑↑	↗	↘	↖		↘	↑	↗
Traffic Volume (veh/h)	0	1258	67	25	710	999	1474	1	0	5	1	11
Future Volume (veh/h)	0	1258	67	25	710	999	1474	1	0	5	1	11
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	0	1324	71	26	747	1052	1553	0	0	5	1	0
Adj No. of Lanes	0	2	0	1	2	1	2	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	2	2	2
Cap, veh/h	0	1312	70	90	1593	1349	1426	749	0	11	11	10
Arrive On Green	0.00	0.38	0.38	0.02	0.45	0.45	0.40	0.00	0.00	0.01	0.01	0.00
Sat Flow, veh/h	0	3510	183	1774	3539	1583	3548	1863	0	1774	1863	1583
Grp Volume(v), veh/h	0	685	710	26	747	1052	1553	0	0	5	1	0
Grp Sat Flow(s),veh/h/ln	0	1770	1830	1774	1770	1583	1774	1863	0	1774	1863	1583
Q Serve(g_s), s	0.0	48.7	48.7	1.1	18.7	37.1	51.0	0.0	0.0	0.4	0.1	0.0
Cycle Q Clear(g_c), s	0.0	48.7	48.7	1.1	18.7	37.1	51.0	0.0	0.0	0.4	0.1	0.0
Prop In Lane	0.00		0.10	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	680	703	90	1593	1349	1426	749	0	11	11	10
V/C Ratio(X)	0.00	1.01	1.01	0.29	0.47	0.78	1.09	0.00	0.00	0.47	0.09	0.00
Avail Cap(c_a), veh/h	0	680	703	183	1673	1385	1426	749	0	224	235	200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	39.1	39.1	31.9	24.3	4.1	37.9	0.0	0.0	62.9	62.7	0.0
Incr Delay (d2), s/veh	0.0	36.3	36.6	1.7	0.2	2.9	52.0	0.0	0.0	28.8	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	30.5	31.6	0.6	9.2	37.6	35.1	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	75.4	75.7	33.6	24.5	7.0	89.9	0.0	0.0	91.6	66.1	0.0
LnGrp LOS		F	F	C	C	A	F			F	E	
Approach Vol, veh/h		1395			1825			1553			6	
Approach Delay, s/veh		75.6			14.5			89.9			87.4	
Approach LOS		E			B			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		63.1		6.8	8.4	54.7		57.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		60.0		16.0	9.0	45.0		51.0				
Max Q Clear Time (g_c+11), s		39.1		2.4	3.1	50.7		53.0				
Green Ext Time (p_c), s		18.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				56.9								
HCM 2010 LOS				E								
Notes												

HCM 2010 Signalized Intersection Summary
7: Folly Rd & Old Folly Rd

2019 Build Conditions
AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations		↗	↖	↑↑	↑↑	↗		
Traffic Volume (veh/h)	0	350	298	1332	661	15		
Future Volume (veh/h)	0	350	298	1332	661	15		
Number	3	18	1	6	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	0	368	314	1402	696	0		
Adj No. of Lanes	0	1	1	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	0	2	2	2	2	2		
Cap, veh/h	0	0	740	2953	1936	866		
Arrive On Green	0.00	0.00	0.12	0.83	0.55	0.00		
Sat Flow, veh/h	0		1774	3632	3632	1583		
Grp Volume(v), veh/h	0.0		314	1402	696	0		
Grp Sat Flow(s),veh/h/ln			1774	1770	1770	1583		
Q Serve(g_s), s			2.2	3.9	4.0	0.0		
Cycle Q Clear(g_c), s			2.2	3.9	4.0	0.0		
Prop In Lane			1.00			1.00		
Lane Grp Cap(c), veh/h			740	2953	1936	866		
V/C Ratio(X)			0.42	0.47	0.36	0.00		
Avail Cap(c_a), veh/h			965	3126	1936	866		
HCM Platoon Ratio			1.00	1.00	1.00	1.00		
Upstream Filter(I)			1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh			2.5	0.8	4.6	0.0		
Incr Delay (d2), s/veh			0.4	0.1	0.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln			1.0	1.8	2.0	0.0		
LnGrp Delay(d),s/veh			2.9	0.9	4.7	0.0		
LnGrp LOS			A	A	A			
Approach Vol, veh/h				1716	696			
Approach Delay, s/veh				1.3	4.7			
Approach LOS				A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	10.4	25.8				36.2		
Change Period (Y+Rc), s	6.0	6.0				6.0		
Max Green Setting (Gmax), s	17.0	17.0				32.0		
Max Q Clear Time (g_c+I), s	14.2	6.0				5.9		
Green Ext Time (p_c), s	0.5	10.9				24.3		
Intersection Summary								
HCM 2010 Ctrl Delay			2.3					
HCM 2010 LOS			A					

Intersection

Int Delay, s/veh 3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1021	56	71	1565	70	67
Future Vol, veh/h	1021	56	71	1565	70	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1134	62	79	1739	78	74

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1197
Stage 1	-	-	1166
Stage 2	-	-	1027
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	579
Stage 1	-	-	259
Stage 2	-	-	306
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	579
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	259
Stage 2	-	-	264

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	60.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	205	-	-	579	-
HCM Lane V/C Ratio	0.743	-	-	0.136	-
HCM Control Delay (s)	60.7	-	-	12.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	4.9	-	-	0.5	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	33	104	0	17	109
Future Vol, veh/h	0	33	104	0	17	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	37	116	0	19	121

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	275	116	0	0	116	0
Stage 1	116	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	715	936	-	-	1473	-
Stage 1	909	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	705	936	-	-	1473	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	9		0		1
HCM LOS	A				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	936	1473
HCM Lane V/C Ratio	-	-	0.039	0.013
HCM Control Delay (s)	-	-	9	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection

Int Delay, s/veh 3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1034	87	212	1644	49	128
Future Vol, veh/h	1034	87	212	1644	49	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	0
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1149	97	236	1827	54	142

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1246
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	554
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	554
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	48
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	76	429	-	-	554	-
HCM Lane V/C Ratio	0.716	0.332	-	-	0.425	-
HCM Control Delay (s)	127.6	17.5	-	-	16.2	-
HCM Lane LOS	F	C	-	-	C	-
HCM 95th %tile Q(veh)	3.4	1.4	-	-	2.1	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 Signalized Intersection Summary
 4: Harris Teeter Shopping Center/Wappoo Creek Dr. & Maybank Hwy

2019 Build Conditions
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1098	33	26	1782	44	54	3	4	209	0	21
Future Volume (veh/h)	31	1098	33	26	1782	44	54	3	4	209	0	21
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	34	1193	36	28	1937	48	59	3	4	227	0	23
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	2069	62	286	2088	934	230	13	9	465	0	347
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.22	0.22	0.22	0.22	0.00	0.22
Sat Flow, veh/h	218	3508	106	452	3539	1583	552	58	39	1599	0	1583
Grp Volume(v), veh/h	34	602	627	28	1937	48	66	0	0	227	0	23
Grp Sat Flow(s),veh/h/ln	218	1770	1844	452	1770	1583	649	0	0	1599	0	1583
Q Serve(g_s), s	5.9	13.3	13.3	2.6	31.1	0.8	2.5	0.0	0.0	0.0	0.0	0.7
Cycle Q Clear(g_c), s	37.0	13.3	13.3	15.8	31.1	0.8	10.2	0.0	0.0	7.7	0.0	0.7
Prop In Lane	1.00		0.06	1.00		1.00	0.89		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	135	1044	1088	286	2088	934	251	0	0	465	0	347
V/C Ratio(X)	0.25	0.58	0.58	0.10	0.93	0.05	0.26	0.00	0.00	0.49	0.00	0.07
Avail Cap(c_a), veh/h	135	1044	1088	286	2088	934	302	0	0	516	0	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.6	8.0	8.0	12.9	11.7	5.4	25.8	0.0	0.0	22.2	0.0	19.4
Incr Delay (d2), s/veh	1.0	0.8	0.8	0.1	7.9	0.0	0.6	0.0	0.0	0.8	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	6.6	6.9	0.3	17.1	0.4	1.1	0.0	0.0	3.6	0.0	0.3
LnGrp Delay(d),s/veh	30.6	8.8	8.8	13.1	19.6	5.5	26.4	0.0	0.0	22.9	0.0	19.5
LnGrp LOS	C	A	A	B	B	A	C			C		B
Approach Vol, veh/h		1263			2013			66			250	
Approach Delay, s/veh		9.4			19.1			26.4			22.6	
Approach LOS		A			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.7		43.0		19.7		43.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		16.0		37.0		16.0		37.0				
Max Q Clear Time (g_c+I1), s		9.7		33.1		12.2		39.0				
Green Ext Time (p_c), s		2.4		3.9		1.6		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				16.1								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
5: Old Folly Rd & Maybank Hwy

2019 Build Conditions
PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑	↑↑			
Traffic Volume (veh/h)	982	337	0	1496	497	8		
Future Volume (veh/h)	982	337	0	1496	497	8		
Number	8	18	7	4	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863	1863	1900		
Adj Flow Rate, veh/h	1034	355	0	1575	530	0		
Adj No. of Lanes	2	0	0	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1511	513	0	2061	707	322		
Arrive On Green	0.58	0.58	0.00	0.58	0.20	0.00		
Sat Flow, veh/h	2688	882	0	3725	3548	1615		
Grp Volume(v), veh/h	702	687	0	1575	530	0		
Grp Sat Flow(s),veh/h/ln	1770	1770	0	1770	1774	1615		
Q Serve(g_s), s	15.1	15.5	0.0	18.4	7.7	0.0		
Cycle Q Clear(g_c), s	15.1	15.5	0.0	18.4	7.7	0.0		
Prop In Lane		0.52	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1030	994	0	2061	707	322		
V/C Ratio(X)	0.68	0.69	0.00	0.76	0.75	0.00		
Avail Cap(c_a), veh/h	1031	994	0	2061	1033	470		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	7.9	8.0	0.0	8.6	20.7	0.0		
Incr Delay (d2), s/veh	1.8	2.1	0.0	1.8	1.8	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.7	7.6	0.0	9.3	3.9	0.0		
LnGrp Delay(d),s/veh	9.8	10.1	0.0	10.4	22.5	0.0		
LnGrp LOS	A	B		B	C			
Approach Vol, veh/h	1389			1575	530			
Approach Delay, s/veh	9.9			10.4	22.5			
Approach LOS	A			B	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				38.0		17.0		38.0
Change Period (Y+Rc), s				6.0		6.0		6.0
Max Green Setting (Gmax), s				32.0		16.0		32.0
Max Q Clear Time (g_c+11), s				20.4		9.7		17.5
Green Ext Time (p_c), s				11.6		1.2		14.5
Intersection Summary								
HCM 2010 Ctrl Delay				12.0				
HCM 2010 LOS				B				
Notes								

HCM 2010 Signalized Intersection Summary
6: Maybank Hwy/Country Club Dr. & Folly Rd

2019 Build Conditions
PM Peak Hour



Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Volume (veh/h)	0	852	3	34	2043	1637	1157	16	0	21	8	14
Future Volume (veh/h)	0	852	3	34	2043	1637	1157	16	0	21	8	14
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	0	897	3	36	2151	1723	1230	0	0	22	8	0
Adj No. of Lanes	0	2	0	1	2	1	2	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	2	2	2
Cap, veh/h	0	1678	6	271	1882	1335	1105	580	0	36	38	32
Arrive On Green	0.00	0.46	0.46	0.02	0.53	0.53	0.31	0.00	0.00	0.02	0.02	0.00
Sat Flow, veh/h	0	3711	12	1774	3539	1583	3548	1863	0	1774	1863	1583
Grp Volume(v), veh/h	0	439	461	36	2151	1723	1230	0	0	22	8	0
Grp Sat Flow(s),veh/h/ln	0	1770	1861	1774	1770	1583	1774	1863	0	1774	1863	1583
Q Serve(g_s), s	0.0	23.3	23.3	1.4	70.0	70.0	41.0	0.0	0.0	1.6	0.6	0.0
Cycle Q Clear(g_c), s	0.0	23.3	23.3	1.4	70.0	70.0	41.0	0.0	0.0	1.6	0.6	0.0
Prop In Lane	0.00		0.01	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	821	863	271	1882	1335	1105	580	0	36	38	32
V/C Ratio(X)	0.00	0.53	0.53	0.13	1.14	1.29	1.11	0.00	0.00	0.61	0.21	0.00
Avail Cap(c_a), veh/h	0	821	863	353	1882	1335	1105	580	0	216	226	192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	25.2	25.2	19.3	30.8	7.1	45.3	0.0	0.0	64.0	63.5	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.6	0.2	71.3	136.6	63.8	0.0	0.0	15.7	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.5	12.1	0.7	52.6	98.9	29.7	0.0	0.0	1.0	0.3	0.0
LnGrp Delay(d),s/veh	0.0	25.8	25.8	19.5	102.2	143.7	109.1	0.0	0.0	79.7	66.2	0.0
LnGrp LOS		C	C	B	F	F	F			E	E	
Approach Vol, veh/h		900			3910			1230			30	
Approach Delay, s/veh		25.8			119.7			109.1			76.1	
Approach LOS		C			F			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		76.0		8.7	8.9	67.1		47.0				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s		70.0		16.0	9.0	55.0		41.0				
Max Q Clear Time (g_c+11), s		72.0		3.6	3.4	25.3		43.0				
Green Ext Time (p_c), s		0.0		0.1	0.0	29.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				103.4								
HCM 2010 LOS				F								
Notes												

HCM 2010 Signalized Intersection Summary
7: Folly Rd & Old Folly Rd

2019 Build Conditions
PM Peak Hour



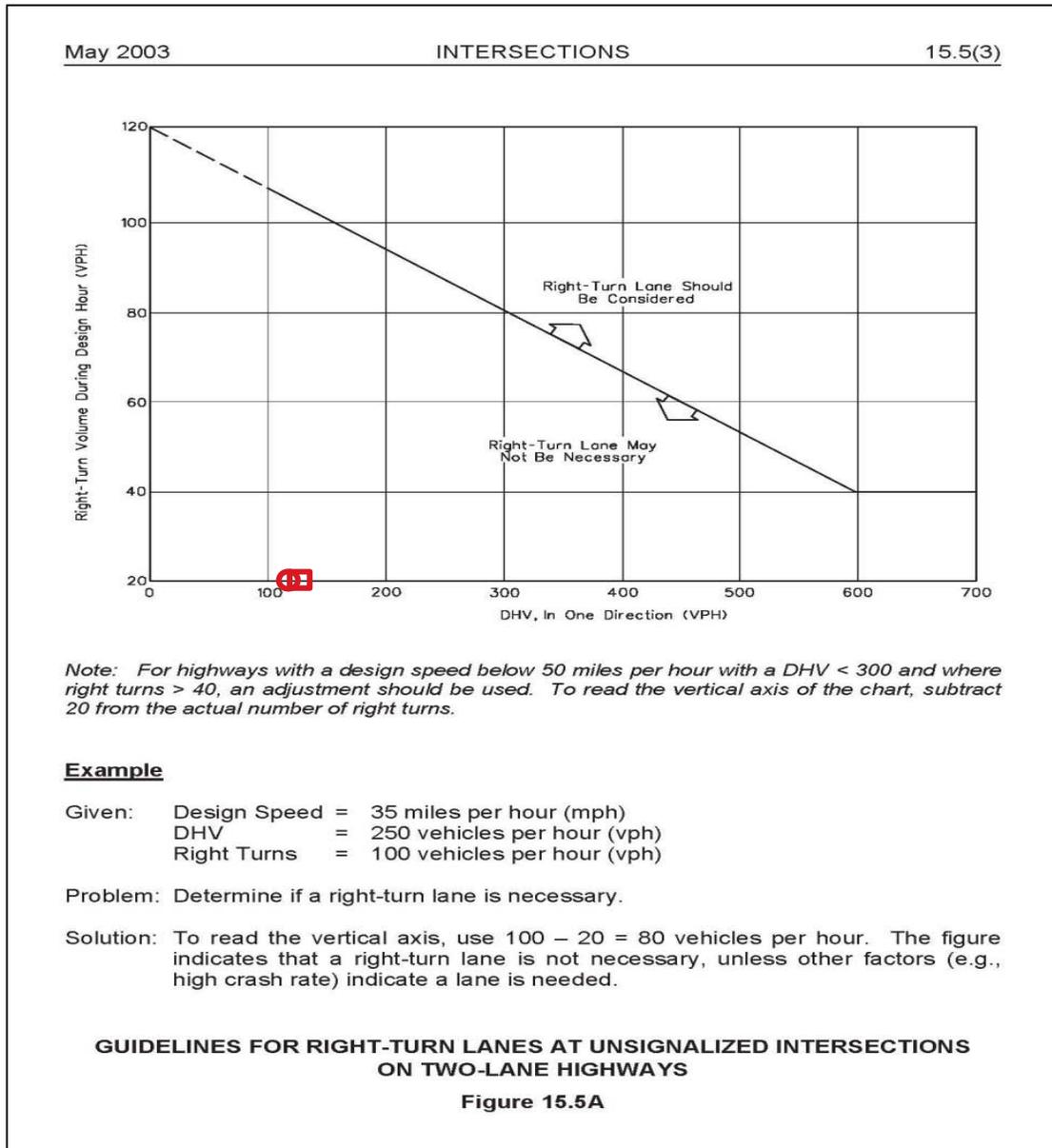
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations		↗	↖	↑↑	↑↑	↘		
Traffic Volume (veh/h)	0	430	602	844	1436	22		
Future Volume (veh/h)	0	430	602	844	1436	22		
Number	3	18	1	6	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	0	453	634	888	1512	0		
Adj No. of Lanes	0	1	1	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	0	2	2	2	2	2		
Cap, veh/h	0	0	680	3326	2100	939		
Arrive On Green	0.00	0.00	0.29	0.94	0.59	0.00		
Sat Flow, veh/h	0		1774	3632	3632	1583		
Grp Volume(v), veh/h	0.0		634	888	1512	0		
Grp Sat Flow(s),veh/h/ln			1774	1770	1770	1583		
Q Serve(g_s), s			24.5	2.0	30.3	0.0		
Cycle Q Clear(g_c), s			24.5	2.0	30.3	0.0		
Prop In Lane			1.00			1.00		
Lane Grp Cap(c), veh/h			680	3326	2100	939		
V/C Ratio(X)			0.93	0.27	0.72	0.00		
Avail Cap(c_a), veh/h			883	3618	2100	939		
HCM Platoon Ratio			1.00	1.00	1.00	1.00		
Upstream Filter(I)			1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh			25.8	0.2	14.4	0.0		
Incr Delay (d2), s/veh			13.9	0.0	1.2	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln			19.4	0.9	15.1	0.0		
LnGrp Delay(d),s/veh			39.7	0.3	15.6	0.0		
LnGrp LOS			D	A	B			
Approach Vol, veh/h				1522	1512			
Approach Delay, s/veh				16.7	15.6			
Approach LOS				B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	34.6	65.2				99.8		
Change Period (Y+Rc), s	6.0	6.0				6.0		
Max Green Setting (Gmax), s	40.0	56.0				102.0		
Max Q Clear Time (g_c+20), s	20.5	32.3				4.0		
Green Ext Time (p_c), s	2.1	23.6				89.8		
Intersection Summary								
HCM 2010 Ctrl Delay			16.2					
HCM 2010 LOS			B					

Appendix G

Turn Lane Analysis Worksheets

RIGHT-TURN LANE WARRANT REVIEW

INTERSECTION: Fleming Road & Project Driveway
MOVEMENT Northbound Right-Turn Lane



2018 Build Conditions	Major Road Volume (Direction of Right Turn Ingress)	Right Turn Volume	Speed along Right Turn Ingress	Symbol
AM Peak Hour	103	0	35	○
PM Peak Hour	104	0	35	□